

File No. 171172

Committee Item No. 2

Board Item No. 3

### COMMITTEE/BOARD OF SUPERVISORS AGENDA PACKET CONTENTS LIST

Committee: Budget & Finance Committee

Date December 13, 2017

Board of Supervisors Meeting

Date January 23, 2018

#### Cmte Board

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#### OTHER (Use back side if additional space is needed)

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Completed by: Linda Wong

Date December 8, 2017

Completed by: Linda Wong

Date December 13, 2017

[Authorizing Agreements - Purchase of Electricity and Related Products and Services for CleanPowerSF - Public Utilities Commission]

Ordinance delegating authority under Charter, Section 9.118, to the General Manager of the Public Utilities Commission to enter into agreements with terms in excess of ten years or requiring expenditures of \$10,000,000 or more for power and related products and services required to supply San Francisco's community choice aggregation program, CleanPowerSF, subject to specified conditions, as defined herein; and authorizing deviations from certain otherwise applicable contract requirements in the Administrative Code and the Environment Code.

NOTE: Unchanged Code text and uncodified text are in plain Arial font. Additions to Codes are in *single-underline italics Times New Roman font*. Deletions to Codes are in *strikethrough italics Times New Roman font*. Board amendment additions are in double-underlined Arial font. Board amendment deletions are in ~~strikethrough Arial font~~. Asterisks (\* \* \* \*) indicate the omission of unchanged Code subsections or parts of tables.

Be it ordained by the People of the City and County of San Francisco:

**Section 1. Background.**

(a) State law allows cities and counties to develop Community Choice Aggregation (CCA) programs, through which local governments supply electricity to serve the needs of participating customers within their jurisdictions while the existing utility continues to provide services such as customer billing, transmission, and distribution.

(b) The City elected to implement a CCA program to provide San Francisco residents and businesses the option to receive cleaner, more sustainable electricity at rates comparable to PG&E's rates. See Ordinance Nos. 86-04, 147-07, 232-09, 45-10, 200-12 and 78-14; and Resolution Nos. 348-12, 331-13 and 75-15.

1 (c) In May 2016, the San Francisco Public Utilities Commission (PUC) launched  
2 San Francisco's CCA program, CleanPowerSF, with initial service to almost 8,000 accounts.  
3 In November 2016, PUC expanded its service and CleanPowerSF now serves about 80,000  
4 accounts. As required by State law for all CCAs, customers are given several opportunities to  
5 opt out of CleanPowerSF service.

6 (d) CleanPowerSF currently offers two levels of supply service: Green, the default  
7 service taken by most customers, which contains 40% renewable energy; and SuperGreen, a  
8 premium option selected by 3.94% of customers, which offers 100% renewable energy.

9 (e) The goals of CleanPowerSF are to provide affordable and reliable electricity  
10 services, cleaner energy alternatives advancing the City's Greenhouse Gas reduction goals,  
11 investment in local renewable energy projects and jobs, and long-term rate and financial  
12 stability.

13 (f) Public and private utilities and energy suppliers use industry-standard pro forma  
14 contracts to ensure the availability of essential services in a timely and cost-effective manner.  
15 Using these agreements can help facilitate negotiations by focusing the parties on the  
16 elements that are most likely to differ from one transaction to another: price, quantity, location,  
17 and duration. These contracts provide standard terms and conditions that address common  
18 issues, but allow parties to determine which provisions to include in a particular contract.

19 (g) City law requires standard contract provisions to protect the City's interests,  
20 ensure accountability, and promote important social values. For the initial phase of  
21 CleanPowerSF service, in Ordinance Nos. 75-15 and 223-15, the Board of Supervisors  
22 authorized the PUC to use certain pro forma contracts and deviate from certain otherwise  
23 applicable contracting requirements, subject to specified conditions. The Board also  
24 delegated authority to the PUC General Manager to enter agreements with terms in excess of  
25 ten years or requiring expenditures of \$10,000,000 or more, subject to specified conditions.

1           **Section 2. Expansion of CleanPowerSF Service to San Francisco Customers.**

2           State law requires cities that offer CCA service to offer service to all residential  
3 customers; many CCA programs, including CleanPowerSF, have added customers in phases  
4 to mitigate financial and operational risk. The CleanPowerSF Phasing Policy (adopted in the  
5 CleanPowerSF Business Practice Policies on December 8, 2015, by PUC Resolution 15-  
6 0267) provides that service will be offered to additional customers throughout San Francisco  
7 in a manner that is financially prudent and operationally feasible. The PUC expects additional  
8 phases of service to meet the following conditions: program rates are sufficient to cover  
9 program costs and rates are projected to be at or below PG&E rates at the launch of each  
10 phase; supply commitments are sufficient to meet new projected customer demand; staffing  
11 and systems and/or qualified third party service providers can handle additional transactions  
12 and customer account volumes; sufficient and reasonably priced credit, collateral and working  
13 capital support is available; and required approvals have been obtained.

14           In May 2017 the PUC completed a study of the options for expanding CleanPowerSF  
15 to offer service to all customers in San Francisco. On May 9, 2017, the PUC Commission  
16 adopted in a public meeting the goal of completing City-wide enrollment into CleanPowerSF  
17 by July 2019. The CleanPowerSF Growth Plan, Final Report, is on file with the Clerk of the  
18 Board of Supervisors in File No. 171172.

19           The PUC anticipates launching a large program expansion in 2018, with further  
20 expansion to all customers in the City in 2019, although exact expansion dates will depend on  
21 available power supply and program costs. To meet these aggressive implementation date  
22 targets and secure the best possible prices and terms, PUC will need to negotiate a mix of  
23 electricity contracts with multiple suppliers simultaneously in an expedited time frame.  
24  
25



1           **Section 3. Contracts Needed for CleanPowerSF Expansion.**

2           (a)     The electricity supplies needed to expand CleanPowerSF service throughout the  
3 City will be obtained through a mix of long-term (10 to 25 years) and shorter term contracts.  
4 To acquire the electricity products necessary to supply this program expansion and meet the  
5 program's portfolio content goals and regulatory obligations, the PUC issued two Requests for  
6 Offers ("RFO"), one in June 2017 (described in subsection (1) below) and one in September  
7 2017 (described in subsection (2) below). To ensure it had adequate credit support for these  
8 purchases and other program requirements, the PUC also issued an RFP for a bank credit  
9 facility in July 2017 (described in subsection (3) below).

10           (1)     On June 22, 2017, the PUC issued an RFO seeking bids for energy,  
11 environmental attributes, and capacity from new or existing eligible renewable resources, for  
12 contracts of up to 25 years in duration. A copy of the renewable energy RFO is on file with  
13 the Clerk of the Board of Supervisors in File No. 171172, and is incorporated herein by  
14 reference as though fully set forth. The PUC received more than 300 bids from 32 different  
15 companies, for supplies from more than 70 different projects, 83% of which are located in  
16 California. Over 90% of the bids offered energy from new renewable resources. After the  
17 evaluation team reviewed the bids to determine compliance with minimum qualifications and  
18 criteria specified in the RFO, the PUC shortlisted two subsets of bidders for further  
19 consideration and possible negotiations. For projects with initial contract delivery dates in  
20 2018 or 2019, the selected bidders are 8minutenergy Renewable LLC; Avangrid Renewables  
21 LLC; Calpine Energy Services L.P.; E.ON Climate & Renewables North America LLC; First  
22 Solar; Frontier Renewable; FTP Power LLC, dba Sustainable Power Group (sPower); Morgan  
23 Stanley Capital Group Inc.; NextEra Energy Resources Acquisitions LLC; Shell Energy North  
24 America (US) L.P.; SunPower Corporation Systems; Terra-Gen LLC; Wadham Energy L.P.;  
25 and Wind Wall Development LLC. For projects with initial contract delivery dates in 2020 or

1 2021, the selected bidders are 8minutenergy Renewable LLC; E.ON Climate & Renewables  
2 North America, LLC; EDF Renewable Development, LLC; EDP Renewables North America  
3 LLC; First Solar; Lendlease Energy Development LLC; NextEra Energy Resources  
4 Acquisitions, LLC; NRG Renew, LLC; Sempra Renewables, LLC; and SunPower Corporation,  
5 Systems.

6 The RFO invited Respondents to submit proposals for community benefits to be  
7 invested in San Francisco County and/or the county in which the renewable project is or will  
8 be located. Community Benefits are firm commitments on the part of the bidder to be  
9 delivered to the community during the term of the contract in accordance with the SFPUC's  
10 2011 Community Benefits Policy and 2009 Environmental Justice Policy, which directs the  
11 SFPUC and its partner firms to be a good neighbor to all who are directly impacted by its  
12 activities and investments. Community benefits must support non-profit or charitable activities  
13 and may not go to, nor benefit, any employee of the SFPUC. The contractor may provide  
14 community benefits in the form of a direct financial contribution, volunteer hours, in-kind  
15 contributions, or a combination thereof. Community benefits are a "zero-dollar task," meaning  
16 no hours or dollars are allocated in the selected contractor's costs under the contract.

17 (2) On September 12, 2017, the PUC issued an RFO seeking bids for  
18 shaped energy, renewable energy, carbon-free energy, and capacity for contracts of up to  
19 three years in length, with start dates as early as 2018 and as late as 2021. A copy of the  
20 shaped energy RFO is on file with the Clerk of the Board of Supervisors in File No. 171172,  
21 and is incorporated herein by reference as though fully set forth. These bids are not for  
22 electricity produced by pre-specified projects; instead, the bidder provides a portfolio of  
23 electricity supply from a variety of available sources responsive to the need the PUC  
24 identified. The RFO excluded bids containing power purchased from coal or nuclear plants.  
25 PUC received bids from five companies. After the evaluation team reviewed the bids to

1 determine compliance with minimum qualifications and criteria specified in the RFO, the PUC  
2 shortlisted five bidders for further consideration and possible negotiations. The selected  
3 bidders are Calpine Energy Services L.P.; Constellation; Direct Energy Business Marketing  
4 LLC; Morgan Stanley Capital Group Inc.; and Shell Energy North America (U.S.) L.P.

5 (3) On July 18, 2017, the PUC issued an RFP for a bank credit facility. A  
6 copy of the bank RFO is on file with the Clerk of the Board of Supervisors in File No. 171172,  
7 and is incorporated herein by reference as though fully set forth. After evaluating the  
8 responses, PUC selected JPMorgan Chase Bank, N.A. (JPMorgan) for further discussions  
9 and negotiations. PUC anticipates negotiating a credit agreement to provide liquidity support,  
10 as needed, for power purchases, regulatory requirements, and other financial obligations of  
11 the program through letters of credit or loans. The credit agreement will have a maximum  
12 term of six years and a maximum credit commitment of \$150 million.

13 (b) Negotiation and Execution of Contracts. PUC expects to negotiate contracts  
14 with one or more bidders for power and to make purchases under one or more of the  
15 contracts after approvals and after final pricing. PUC anticipates that some purchases will be  
16 made in early 2018, and additional purchases will be made over the next few years, through  
17 2021. ~~The PUC Commission in public meetings will consider authorizing one or more of these~~  
18 ~~contracts. PUC expects the Commission to review and consider approvals related to the~~  
19 ~~RFOs for power supply in its regular Commission meeting on November 14, 2017. PUC also~~  
20 ~~expects to successfully conclude negotiations with JPMorgan for the bank credit facility, which~~  
21 ~~will is expected to be considered by the PUC Commission in a public meeting in January 2018~~  
22 ~~2017.~~ The General Manager will not execute any contracts unless conditions specified by the  
23 PUC Commission have been satisfied, including requirements for program rates. Final  
24 program rates will provide for program cost recovery including energy procurement and  
25 administrative and financial costs of program implementation.

1           (c) In a public meeting on November 14, 2017, the PUC Commission approved the  
2 pool of qualified bidders for energy supply contracts and authorized the General Manager to  
3 negotiate energy supply contracts with one or more of those bidders, and to execute one or  
4 more contracts, subject to the following conditions:

5                   (1) the total cost of the executed contracts is consistent with the rate setting  
6 methodology adopted by the Commission in Resolution 15-0112;

7                   (2) the renewable energy supplied is from resources eligible to be counted as  
8 California Renewables Portfolio Standard Portfolio Content Category 1 or Portfolio Content  
9 Category 2 resources;

10                   (3) the counterparties to any contract must be creditworthy;

11                   (4) the total combined volume of power procured under contracts from the  
12 two competitive solicitations shall not exceed 435 MW per year;

13                   (5) the duration of any contract under the renewable energy RFO shall not  
14 exceed 25 years, and the duration of any contract under the shaped energy RFO shall not  
15 exceed three years;

16                   (6) the total quantity of Resource Adequacy Capacity procured shall not  
17 exceed the expected quantity established by state law and regulation for load of 435 MW per  
18 year; and

19                   (7) the total cost of all energy supply contracts shall not exceed \$175 million  
20 per year.

21           The Commission further determined it would review the expected costs of CCA service  
22 and consider authorizing the General Manager to finalize the schedule of rates and charges  
23 for the next expansion to additional customers; the contracts would not be effective until the  
24 PUC has reviewed the CleanPowerSF risk assessment for the proposed portfolio of contracts  
25 to be executed; and the General Manager would report to the SFPUC on the final schedule of

1 rates and charges prior to commencement of the opt-out process. See Resolution No. 17-  
2 0226, which is on file with the Clerk of the Board of Supervisors in File No. 171172, and is  
3 incorporated herein by reference as though fully set forth.  
4

5 **Section 4. Grant of Authority to Use Standard Power Contracts.**

6 As approved in Ordinances 75-15 and 223-15, and for the reasons stated there in  
7 addition to the reasons stated above, for purchases of power and related products and  
8 services necessary to provide CleanPowerSF service, the Board of Supervisors authorizes  
9 the use of the following standardized contracts that deviate from the City's contract forms:

10 (a) Western System Power Pool ("WSPP") Agreement. The WSPP is a group of  
11 more than 300 publicly-owned and private utilities, including Alameda Municipal Power, the  
12 City of Palo Alto, the City of Roseville, the Sacramento Municipal Utility District, and Silicon  
13 Valley Power, all of which operate publicly-owned utilities. The City, through PUC, is a  
14 member of the WSPP. The WSPP has developed an agreement that sets forth standard  
15 terms and conditions for the purchase and sale of power and related products and services.  
16 A copy of the current WSPP agreement is on file with the Clerk of the Board of Supervisors in  
17 File No.171172, and is incorporated herein by reference as though fully set forth. The WSPP  
18 agreement has been approved by the Federal Energy Regulatory Commission ("FERC").  
19 The WSPP agreement is periodically updated and modified subject to the approval of FERC.  
20 The Board of Supervisors authorized the use of the WSPP agreement for CleanPowerSF  
21 purchases in Ordinance No. 75-15.

22 (b) The Edison Electric Institute (EEI) Master Agreement. The EEI, in collaboration  
23 with more than 80 member utilities, power marketers, power generators, and customer  
24 representatives, developed an agreement that sets forth standard terms and conditions for the  
25 purchase and sale of power and related products and services. The EEI agreement is

1 updated as needed to reflect market changes. A copy of the current EEI agreement is on file  
2 with the Clerk of the Board of Supervisors in File No. 171172 and is incorporated herein by  
3 reference as though fully set forth. The Board of Supervisors authorized the use of the EEI  
4 agreement for CleanPowerSF purchases in Ordinance No. 75-15.

5 (c) City Pro forma Agreements. In connection with the recent RFOs for power  
6 supplies, the PUC has developed its own standardized contract forms for three different types  
7 of energy supply, combining standard industry terms with key City requirements. Ordinance  
8 No. 75-15 authorized the use of form agreements developed by PUC for CleanPowerSF  
9 purchases. Each of these form agreements is on file with the Clerk of the Board of  
10 Supervisors in File No. 171172 and is incorporated herein by reference as though fully set  
11 forth:

- 12 (1) Renewable Power Purchase Agreement (New Facility);
- 13 (2) Renewable Power Purchase Agreement (Existing Facility); and
- 14 (3) Power Purchase and Sale Agreement.

15 (d) The Board of Supervisors authorizes the use of the WSPP agreement and the  
16 EEI agreement for the PUC's purchase of power and related products and services,  
17 notwithstanding that the terms of those agreements may deviate from the City's standard  
18 contract terms; the Board of Supervisors authorizes modifications to the form agreements so  
19 long as such modifications, in the judgment of the General Manager and the City Attorney, do  
20 not materially decrease the City's rights or materially increase its liabilities.

21 (e) The Board of Supervisors approves the pro forma contracts developed by PUC  
22 for the purchase of power and related products and services, notwithstanding that the terms of  
23 those agreements may deviate from the City's standard contract terms; the Board of  
24 Supervisors authorizes modifications to the form agreements so long as such modifications, in  
25

1 the judgment of the General Manager and the City Attorney, do not materially decrease the  
2 City's rights or materially increase its liabilities.

3  
4 **Section 5. Agreement for a Bank Credit Facility.**

5 The Board of Supervisors authorizes the General Manager, subject to the conditions in  
6 Section 7, to enter an agreement for liquidity support with JPMorgan, or with another entity if  
7 negotiations with JPMorgan do not result in an acceptable agreement. The General Manager  
8 may utilize the waivers in Section 6 below and may make modifications to the standard City  
9 agreements so long as such modifications, in the judgment of the General Manager and the  
10 City Attorney, do not materially decrease the City's rights or materially increase its liabilities.

11  
12 **Section 6. Waiver of Certain Contract-Related Requirements in the**  
13 **Administrative Code and the Environment Code.**

14 (a) Where the General Manager finds and documents in writing both that the  
15 transaction represents the best opportunity available to the City to obtain essential services  
16 and products in a manner beneficial to the City, and that it is not feasible to add all standard  
17 City contract provisions to the agreement, the Board of Supervisors hereby grants waivers of  
18 the following standard contract provisions to the extent found necessary by the General  
19 Manager, and finds such waivers to be reasonable and in the public interest:

- 20 (1) Implementing the MacBride Principles (Admin. Code Chapter 12F);  
21 (2) Increased participation by small and micro local businesses in City  
22 contracts (Admin. Code Chapter 14B);  
23 (3) The competitive bidding requirement (Admin. Code Section 21.1);  
24 (4) First source hiring requirements (Admin. Code Chapter 83); and  
25

1 (5) The tropical hardwood and virgin redwood ban (Environ. Code  
2 Chapter 8).

3 (b) Where the General Manager finds and documents in writing both that the  
4 agreement represents the best opportunity available to the City to obtain essential services  
5 and products in a manner beneficial to the City, and that it is not feasible to add all standard  
6 City contract provisions to the agreement, the Board of Supervisors waives the requirement to  
7 include in the agreement references to the following City Code provisions to the extent found  
8 necessary by the General Manager, and finds such waivers to be reasonable and in the public  
9 interest:

10 (1) Public access to meeting and records of non-profit organizations (Admin.  
11 Code Section 12L);

12 (2) Sweatfree Contracting (Admin. Code Section 12U.4);

13 (3) Food service waste reduction (Environ. Code Section 1605).

14 (c) The waivers specified in this Section 6 shall apply only to contracts which  
15 include language requiring compliance with all applicable federal, state, and local laws.  
16

17 **Section 7. Conditions on Contract Authority Granted in this Ordinance.**

18 (a) The City's payment obligations under these contracts for CleanPowerSF power  
19 supply and bank credit facility to support CleanPowerSF expansion to offer service throughout  
20 San Francisco shall be special limited obligations of the City payable solely from the revenues  
21 of CleanPowerSF.

22 (b) The total cost of the power supply contracts authorized by this ordinance, with  
23 terms from one to twenty-five years, shall not exceed \$175 million per year.

24 (c) The total credit commitment under the bank credit facility agreement shall not  
25 exceed \$150 million over the term of the agreement, which shall not exceed six years.



1 (d) The contracts shall be approved by the PUC acting through its Commission in a  
2 public meeting. The Commission may delegate approval authority to the General Manager,  
3 subject to conditions specified by the Commission in a public meeting.

4 (e) All conditions established by the PUC shall be met, including but not limited to  
5 requirements regarding program rates, program expansion, and electricity portfolio content.

6 (f) The PUC shall submit annual reports to the Board of Supervisors that include  
7 annual program costs, the rates charged by the PUC to CleanPowerSF customers to recover  
8 costs, and a comparison of CleanPowerSF rates to PG&E rates.

9  
10 **Section 8. Community Benefits in Renewable Power RFO.**

11 The Board of Supervisors finds that the community benefits component of the RFO for  
12 renewable energy supplies is reasonable and beneficial to the City and authorizes its inclusion  
13 in contracts, where the General Manager deems feasible and appropriate, so long as the PUC  
14 Commission finds, in a public meeting, that the community benefits component is reasonable  
15 and serves a utility purpose.

16  
17 **Section 9. Delegation of Authority Under Charter Section 9.118 to the PUC**  
18 **General Manager.**


19 Pursuant to its authority under Charter Section 9.118, the Board of Supervisors  
20 delegates to the PUC General Manager authority to purchase renewable and shaped energy  
21 supplies and credit support for CleanPowerSF from bidders selected by competitive  
22 solicitation as described above in Section 3 of this ordinance, using contracts with terms in  
23 excess of ten years or requiring expenditures of ten million dollars or more including  
24 amendments to such agreements with an impact of greater than \$500,000, so long as the  
25

1 contract term does not exceed 25 years, and subject to the conditions specified above in  
2 Section 7.

3  
4 **Section 10. Effective Date.**

5 This ordinance shall become effective 30 days after enactment. Enactment occurs  
6 when the Mayor signs the ordinance, the Mayor returns the ordinance unsigned or does not  
7 sign the ordinance within 10 days of receiving it, or the Board of Supervisors overrides the  
8 Mayor's veto of the ordinance.

9  
10 APPROVED AS TO FORM:  
11 DENNIS J. HERRERA, City Attorney

12 By:   
13 THERESA L. MUELLER  
14 Deputy City Attorney

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**LEGISLATIVE DIGEST**

[Authorizing Agreements for the Purchase of Electricity and Related Products and Services for CleanPowerSF – Public Utilities Commission]

**Ordinance delegating authority under Charter Section 9.118 to the General Manager of the Public Utilities Commission to enter into agreements with terms in excess of ten years or requiring expenditures of \$10,000,000 or more for power and related products and services required to supply San Francisco’s community choice aggregation program, CleanPowerSF, subject to specified conditions; and authorizing deviations from certain otherwise applicable contract requirements in the Administrative Code and the Environment Code.**

Existing Law

Section 9.118(b) of the Charter requires approval by the Board of Supervisors for agreements with an expected term longer than ten years or requiring expenditures of 10 million dollars or more.

The San Francisco municipal codes contain many contracting requirements for the procurement of goods and services. In certain instances, the Board of Supervisors may exempt contracts from these requirements via ordinance.

Amendments to Current Law

This ordinance would not amend current law.

Authority Granted

This ordinance would grant approvals for PUC to purchase electricity and related products and services for expanding CleanPowerSF service using agreements that deviate from the City’s standard contracts. The ordinance would also allow the General Manager of the PUC to waive certain City contracting requirements if it is not feasible to include those requirements in these power contracts. The ordinance would also delegate the Board of Supervisors’ authority under Charter section 9.118(b) to allow PUC to enter contracts that exceed ten years in duration or cost \$10 million or more.

The ordinance makes these approvals subject to several conditions, including the following: the contracts were obtained through a competitive solicitation, the PUC Commission must approve the contracts in a public meeting, and the contracts meet other conditions established by the PUC Commission including those related to rates, renewable energy content, and program expansion.

FILE NO. 171172

Background Information

The City, acting through the San Francisco Public Utilities Commission (PUC), has implemented a program called CleanPowerSF. Under this program, the City provides electricity to participating customers at prices similar to PG&E's prices. PG&E continues to deliver the energy. CleanPowerSF uses more renewable and greenhouse-gas free energy than PG&E does. This program is authorized by state law. See, e.g., Public Utilities Code § 366.2.

The PUC first launched CleanPowerSF service in 2016. To prepare for that initial launch, the Board of Supervisors approved similar ordinances granting purchasing authority. See Ordinance Nos. 75-15 and 223-15. CleanPowerSF currently has about 80,000 customers, and intends to expand the program to offer service throughout all of San Francisco over the next five years. The costs of CleanPowerSF contracts will be paid by revenues from the customers participating in the program.

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<p><b>Item 2</b> <b>File 17-1172</b></p>	<p><b>Department:</b> Public Utilities Commission (PUC)</p>
<p><b>EXECUTIVE SUMMARY</b></p>	
<p style="text-align: center;"><b>Legislative Objectives</b></p>	
<p>The proposed ordinance authorizes the SFPUC General Manager to (1) enter into contracts of \$10,000,000 or more using standardized power contracts; (2) enter into an agreement for credit and liquidity support with JPMorgan; and (3) waive standard contracting provisions required by the City’s municipal codes, without further Board of Supervisors approval.</p>	
<p style="text-align: center;"><b>Key Points</b></p>	
<ul style="list-style-type: none"> <li>• Through Community Choice Aggregation (CCA) programs, local governments are allowed by state law to supply electricity to serve the needs of customers within their jurisdictions while the existing private utility (PG&amp;E in San Francisco) continues to provide various services including billing, transmission, and distribution.</li> <li>• San Francisco’s CCA program (“CleanPowerSF”) launched in 2016 and currently serves about 80,000 customer accounts with either (1) default Green service with 40 percent renewable energy content; or (2) optional premium SuperGreen service with 100 percent renewable energy content. The next major auto-enrollment phase in July 2018 would add approximately 150,000 customers. The final phase for full-scale citywide enrollment would occur by July 2019 and would involve approximately 125,000 additional customers, for a total of approximately 350,000 customer accounts.</li> <li>• To purchase electricity products to supply the program expansion, SFPUC issued two Requests for Offers (RFO) in June 2017 and September 2017. To ensure it had adequate credit support for these purchases and other program requirements, SFPUC also issued a Request for Proposals (RFP) for a bank credit facility in July 2017.</li> </ul>	
<p style="text-align: center;"><b>Fiscal Impact</b></p>	
<ul style="list-style-type: none"> <li>• The revenues, expenses, assets and liabilities of CleanPowerSF are separate from the rest of the Power Enterprise and SFPUC. CleanPowerSF program revenues and costs are estimated to increase from \$33.7 million in FY 2016-17 to \$266.0 million in FY 2022-23.</li> <li>• The total cost of the power supply contracts authorized under the proposed ordinance, with terms from 1 to 25 years, will not exceed \$175 million per year, based on SFPUC’s estimate of the maximum amount required to be contracted to support citywide enrollment in the CleanPowerSF program</li> </ul>	

### Policy Consideration

- According to officials at Marin Clean Energy and Silicon Valley Clean Energy<sup>1</sup>, short-term (one- to two-year) power purchase agreements require a quick turnaround to execute the contracts, sometimes within a few hours of receiving the draft contract from the supplier. Officials note that it is important to maintain the confidentiality of communications with selected bidders who operate in a competitive market with multiple CCAs and large utilities such as PG&E. To facilitate this process, both Marin Clean Energy and Silicon Valley Clean Energy receive prior approval from their governing bodies to (1) allow executive staff to engage in negotiations for agreements over a certain dollar amount, and (2) use pre-approved form contracts. Silicon Valley Clean Energy notes that, although their governing board may grant permission to engage in negotiations for long-term (10- to 20-year) deals, each long-term contract must be approved by their board when negotiations are completed.

### Recommendations

1. Amend the proposed ordinance to require the SFPUC to submit annual reports to the Board of Supervisors that include annual program costs, the rates charged by SFPUC to CleanPowerSF customers to recover costs, and comparison of CleanPowerSF rates to PG&E rates.
2. Approval of the proposed ordinance, as amended, is a policy matter for the Board of Supervisors because the proposed ordinance waives (1) standard contracting provisions required by the City's municipal codes, and (2) the Board of Supervisors authority under Charter Section 9.118, authorizing the SFPUC to enter into contracts of \$10,000,000 or more without further Board of Supervisors approval.

<sup>1</sup> Marin Clean Energy and Silicon Valley Clean Energy are two of the six CCAs within PG&E service territory in California. The other four are CleanPowerSF, Sonoma Clean Power, Peninsula Clean Energy, and Redwood Coast Energy Authority.

**MANDATE STATEMENT**

Section 9.118(b) of the City's Charter requires approval by the Board of Supervisors for contracts with an expected term longer than ten years or requiring expenditures of \$10 million or more.

**BACKGROUND****Community Choice Aggregation**

State law allows cities and counties to develop Community Choice Aggregation (CCA) programs, through which local governments supply electricity to serve the needs of participating customers within their jurisdictions while the existing private utility (PG&E in San Francisco) continues to provide various services including billing, transmission, and distribution.

State law requires local governments that offer CCA service to serve all residential customers; CCA programs, including San Francisco's CCA program ("CleanPowerSF"), have added customers in phases to mitigate financial and operational risk. According to the May 2017 CleanPowerSF Growth Plan, although 91 percent of electricity accounts in the City are residential, and therefore eligible for CleanPowerSF, residential accounts represent only 31 percent of total citywide energy usage.

**Previous CleanPowerSF Legislation**

In May 2015, the Board of Supervisors authorized the San Francisco Public Utilities Commission (SFPUC) General Manager to use pro forma agreements to purchase and sell electricity to operate the CleanPowerSF program without further Board of Supervisors approval (File No. 15-0408; Ordinance No. 75-15). In December 2015, the Board of Supervisors authorized the SFPUC General Manager to enter into agreements requiring expenditures of \$10 million or more for electric power and related products and services to launch the initial phases of CleanPowerSF (File No. 15-1123; Ordinance No. 223-15).

**CleanPowerSF Launch**

In December 2015, SFPUC Power Enterprise staff presented a Business Plan for the launch of CleanPowerSF. The 2015 Business Plan laid out the initial schedule for growing CleanPowerSF beyond the Phase I launch of 50 megawatts (MW) of average demand in 2016, with the program growing by 118 to 125 MW blocks of average electricity demand in 2019, 2021, and 2022 until reaching full service of approximately 350,000 customers and approximately 400 MW of average electricity demand in 2022<sup>2</sup>, as shown in Table 1 below.

---

<sup>2</sup> The Business Plan assumed an opt-out rate of 20 percent, which is higher than current expectations.

**Table 1: 2015 Business Plan Growth Projections (Average Demand in MW)**

Year	Additional Supply (MW)	Cumulative Supply (MW)
2016	50	50
2019	118	168
2021	120	288
2022	125	413

In May 2016, SFPUC launched CleanPowerSF with initial service to about 8,000 customer accounts. In November 2016, SFPUC expanded CleanPowerSF service to about 80,000 customer accounts. During the initial phase, customers located within a certain geographic area were automatically enrolled in the CleanPowerSF program and were given opportunities to opt-out of participating in the program.

CleanPowerSF currently offers two level of supply service: (1) Green, the default service which contains 40 percent renewable energy; and (2) SuperGreen, a premium option selected by about 4 percent of customers which offers 100 percent renewable energy.

#### CleanPowerSF Growth Plan

In the May 2017 CleanPowerSF Growth Plan, CleanPowerSF staff recommend completing citywide enrollment by the end of FY 2018-19<sup>3</sup>, or three years sooner than projected in the 2015 Business Plan. According to Mr. Michael Hyams, Director of CleanPowerSF, the 2015 Business Plan timeline for enrollment was based on a self-funding approach with no access to third-party lines of credit, whereas the 2017 Growth Plan will have credit support through the bank credit facility discussed below.

The next major auto-enrollment phase in July 2018 (Phase II) would add approximately 150,000 customers and accommodate a total average electricity demand of 250 MW. The final phase for full-scale citywide enrollment would occur by July 2019 (Full Scale) and would involve approximately 125,000 additional customers, for a total of approximately 350,000 customer accounts with average electricity demand of approximately 400 MW, as shown in Table 2 below.

**Table 2: 2017 Growth Plan Projections (Average Demand in MW)**

Year	Additional Supply (MW)	Cumulative Supply (MW)
2016	60	60
2018	190	250
2019	150	400

According to Mr. Hyams, SFPUC will need to execute approximately 8 to 10 contracts for electricity supplies by March 2018 to support the Phase II expansion in July 2018. Enrollment notifications, which include information about renewable energy content and prices, would need to be sent to customers by May 2018.

<sup>3</sup> Exact expansion dates will depend on available power supply and program costs.



To purchase electricity products to supply the program expansion, SFPUC issued two Requests for Offers (RFO) in June 2017 and September 2017. To ensure it had adequate credit support for these purchases and other program requirements, SFPUC also issued a Request for Proposals (RFP) for a bank credit facility in July 2017.

### **June 2017 Request for Offers**

The June 22, 2017 RFO sought bids for energy, environmental attributes, and capacity from new or existing eligible renewable resources, for contracts up to 25 years in duration. SFPUC received more than 300 bids from 32 companies for supplies from 70 projects, 83 percent of which are located in California. Based on the minimum qualifications and criteria specified in the RFO, SFPUC shortlisted two subsets of bidders for further consideration: (1) 14 bidders for projects with initial contract delivery dates in 2018 or 2019; and (2) 10 bidders for projects with initial contract delivery dates in 2020 and 2021.

According to Mr. Hyams, the projects with delivery dates in 2018 or 2019 tend to be existing renewable energy resources and the projects with delivery dates in 2020 or 2021 will be new resources that have not yet been built. Therefore, although the new projects have delivery dates that are a few years in the future, SFPUC needs to enter into commitments in the near term for suppliers to secure the necessary financing to bring the projects online by the delivery date.

### **September 2017 Request for Offers**

The September 12, 2017 RFO sought bids for shaped energy<sup>4</sup>, renewable energy, carbon-free energy, and capacity for contracts of up to 3 years in length with start dates as early as 2018 and as late as 2021. Rather than bids for electricity produced by specific projects (as is the case for the June 2017 RFO), bidders provided a portfolio of electricity supply from a variety of sources responsive to the need identified by SFPUC. The RFO excluded bids containing power purchased from coal or nuclear plants. SFPUC received bids from five companies and shortlisted five bidders for further consideration after reviewing bids for minimum qualifications and criteria specified in the RFO.

### **July 2017 RFP for a Bank Credit Facility**

After issuing an RFP for a bank credit facility on July 18, 2017 and evaluating the three responsive bids, SFPUC selected JPMorgan Chase Bank, N.A. (JPMorgan) for further negotiations. SFPUC is currently negotiating a credit agreement in order to (1) enter into fixed price energy contracts with suppliers; (2) potentially refinance the Power Enterprise's loan to CleanPowerSF; (3) provide working capital to the program (if needed); and (4) replace existing standby letters of credit.

## **DETAILS OF PROPOSED LEGISLATION**

The proposed ordinance delegates authority to the SFPUC General Manager to enter into agreements with terms in excess of 10 years or requiring expenditures of \$10 million or more,

<sup>4</sup> Shaped energy may include non-renewable sources that are intermittently substituted for wind or solar renewable sources due to the variability in wind and solar resources (i.e., weather, season, time of day).

without further Board of Supervisors approval, for power and related products and services required to supply CleanPowerSF.

### **Authority Granted to SFPUC General Manager**

The proposed ordinance authorizes the SFPUC General Manager to:

1. Use the following standardized power contracts that set forth standard terms and conditions for the purchase and sale of power and related products and services. These contracts deviate from the City's contract forms. The proposed ordinance authorizes modifications<sup>5</sup> to the form agreements so long as such modifications, in the judgment of the General Manager and the City Attorney, do not materially decrease the City's rights or materially increase its liabilities.
  - a. Western System Power Pool<sup>6</sup> Agreement, approved by the Federal Energy Regulatory Commission (FERC)
  - b. Edison Electric Institute<sup>7</sup> Master Agreement
  - c. Pro forma agreements developed by SFPUC for three types of energy supply, combining standard industry terms with City requirements
    - i. Renewable Power Purchase Agreement (New Facility)
    - ii. Renewable Power Purchase Agreement (Existing Facility)
    - iii. Power Purchase and Sale Agreement
2. Enter into an agreement for credit and liquidity support with JPMorgan, or with another entity if negotiations with JPMorgan do not result in an acceptable agreement. The proposed ordinance authorizes (1) waiver of certain City contract-related requirements in the Administrative Code and the Environment Code, and (2) modifications to the standard City agreements so long as such modifications, in the judgment of the General Manager and the City Attorney, do not materially decrease the City's rights or materially increase its liabilities.
3. Waive the following standard contract and City code provisions, upon finding and documenting in writing both that (1) the transaction/agreement represents the best opportunity available to the City to obtain essential services and products in a manner beneficial to the City, and (2) it is not feasible to add all standard City contract provisions to the agreement.
  - a. Implementing the MacBride Principles (Administrative Code Chapter 12F)
  - b. Increased participation by small and micro local businesses in City contracts (Administrative Code Chapter 14B)
  - c. The competitive bidding requirement (Administrative Code Section 21.1)

<sup>5</sup> According to Mr. Hyams, the anticipated modifications to the standard agreements are incorporated in the pro forma agreements on file with the Board of Supervisors (File No. 17-1172).

<sup>6</sup> SFPUC is a member of the Western System Power Pool, which is a group of more than 300 publicly-owned and private utilities.

<sup>7</sup> Edison Electric Institute is the association that represents investor-owned electric companies in the U.S. They developed the master agreement in collaboration with 80 member utilities, power marketers, and customer representatives.

- d. First source hiring requirements (Administrative Code Chapter 83)
- e. The tropical hardwood and virgin redwood ban (Environment Code Chapter 8)
- f. Public access to meeting and records of non-profit organizations (Administrative Code Section 12L)
- g. Sweatfree Contracting (Administrative Code Section 12U.4)
- h. Food service waste reduction (Environment Code Section 1605)

### Conditions on Contract Authority

The proposed ordinance includes the following conditions on contract authority delegated to the SFPUC General Manager:

1. Payment obligation under contracts for CleanPowerSF power supply and bank credit facility to support CleanPowerSF expansion will be payable solely from the revenues of CleanPowerSF;
2. The total cost of the power supply contracts authorized under the proposed ordinance, with terms from 1 to 25 years, will not exceed \$175 million per year;
3. The credit agreement will have a maximum term of 6 years and a maximum credit commitment of \$150 million;
4. The contracts will be approved by the SFPUC Commission in a public meeting, although the SFPUC Commission may delegate approval authority to the General Manager, subject to conditions specified by the Commission in a public meeting;
5. All conditions established by SFPUC, including but not limited to requirements regarding program rates, program expansion, and electricity portfolio content, will be met.

### FISCAL IMPACT

CleanPowerSF's 2015 Business Plan and Business Practice Policies established it as a financially-independent entity within the SFPUC Power Enterprise, with separate ratepayers. As a result, revenues, expenses, assets and liabilities of CleanPowerSF are separate from the rest of the Power Enterprise and SFPUC. The Power Enterprise provided limited financial backing, in the form of an \$8 million loan and securitization of letters of credit, to support CleanPowerSF's launch. The expansion of the CleanPowerSF program will use third-party financing without any further financing from the Power Enterprise<sup>8</sup>.

CleanPowerSF program revenues and costs are estimated to increase from \$33.7 million in FY 2016-17 to \$266.0 million in FY 2022-23 as shown in Table 3 below. According to Mr. Hyams, these projections assume that excess revenues will be used to fund reserves until the reserve target is met, which is expected to occur in FY 2021-22, at which time SFPUC will consider options for handling excess revenues, such as reducing rates or purchasing a larger share of locally-produced electricity, which is typically more expensive than non-local sources.

<sup>8</sup> CleanPowerSF will continue its debt service payments to the Power Enterprise on the established payment schedule.

**Table 3: CleanPowerSF Projected Sources and Uses of Funds (millions of \$)**

	FYE 2017 (Actual)	FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022
<b>SOURCES</b>						
Green Sales Revenue	\$33.5	\$37.8	\$127.1	\$240.3	\$251.5	\$259.2
SuperGreen Sales Revenue	0.4	0.5	1.8	5.2	6.9	8.1
Uncollectable Revenue	(0.2)	(0.2)	(0.6)	(1.2)	(1.3)	(1.3)
<b>Total Sources</b>	<b>\$33.7</b>	<b>\$38.0</b>	<b>\$128.3</b>	<b>\$244.3</b>	<b>\$257.1</b>	<b>\$266.0</b>
<b>USES</b>						
Energy Supply	\$22.6	\$27.1	\$94.6	\$173.6	\$179.2	\$196.0
Operating Costs	5.7	8.2	17.9	24.4	24.0	24.7
Power Enterprise Loan Repayment	0.8	2.0	2.0	2.0	1.3	0.0
SuperGreen Programs/Projects	0.1	0.1	0.3	0.9	1.1	1.2
Surplus Cash for Reserves	4.5	0.6	13.5	43.4	51.6	44.1
<b>Total Uses</b>	<b>\$33.7</b>	<b>\$38.0</b>	<b>\$128.3</b>	<b>\$244.3</b>	<b>\$257.1</b>	<b>\$266.0</b>
Operating Reserve	\$6.8	\$7.1	\$25.1	\$46.1	\$45.4	\$44.4
Contingency/ Rate Stabilization Reserve	4.8	5.1	0.5	23.0	40.1	41.5

Note: May not add due to rounding error

### Not-To-Exceed Contract Authority of \$175 Million

The total cost of the power supply contracts authorized under the proposed ordinance, with terms from 1 to 25 years, will not exceed \$175 million per year. According to Mr. Hyams, the \$175 million per year not-to-exceed amount is the SFPU's estimate of the maximum amount required to be contracted to support citywide enrollment in the CleanPowerSF program, with a buffer for higher than anticipated prices at the time of contract execution. According to Mr. Hyams, although annual expenditures for energy supply are projected to exceed \$175 million by FY 2021-22, CleanPowerSF will "forward contract"<sup>9</sup> with suppliers at a maximum of approximately 85 to 95 percent of future projected demand, which will likely maintain annual contract authority below the \$175 million limit. If CleanPowerSF needs to procure more supply than would be provided by forward contracting, and the additional procurement would exceed the \$175 million annual contracting limit, those contracts would be subject to Board of Supervisors approval.

<sup>9</sup> Forwarding contracting involves committing to procure future supply equivalent to a portion of projected demand. Forward contract amounts step down as delivery dates extend into the future, and step up as delivery dates approach. For example, as of the date of this report, CleanPowerSF would seek to procure 95 percent of projected demand for 2018, 80 to 85 percent of projected demand for 2019, 70 percent of projected demand for 2020, and 30 to 40 percent of projected demand for the term years beyond 2020.

**POLICY CONSIDERATION****Citywide Enrollment Accelerated Since 2015 Business Plan**

CleanPowerSF currently has 16 FTE staff and anticipates needing 32 FTE (or 16 additional FTEs) staff for Phase II implementation by July 2018, and a total of 54 FTE staff (or 38 additional FTEs) for Full Scale implementation by July 2019. According to Mr. Hyams, SFPUC has submitted requests to the Department of Human Resources (DHR) and the Mayor's Office to add new Temporary positions for the implementation of Phase II. As of December 5, 2017, SFPUC is waiting for approval from DHR to recruit for and hire the positions. According to Mr. Hyams, to support Phase II enrollment activities and program operations post-enrollment, the new staff would ideally be added between February and May 2018.

As these positions have not yet been approved for hiring, it is uncertain that CleanPowerSF will have sufficient staffing to implement Phase II by the accelerated target date of July 2018.

**Waivers of Administrative Code and Environment Code Contract Provisions**

The proposed ordinance delegates authority to the SFPUC General Manager to waive certain standard contract and City code provisions, identified above. According to Mr. Michael Hyams, Director of CleanPowerSF, the City's standard contract terms identified in the proposed ordinance are not standard electric industry terms and many energy sellers reject such standard terms or will mark up the cost of the energy to account for what they may consider a non-market condition and liability. In January 2016, the SFPUC General Manager waived these standard contract and City code provisions pursuant to authority granted in Ordinance 75-15 for CleanPowerSF power purchase agreements. According to Mr. Hyams, if the General Manager decides to waive requirements in the Administrative Code or the Environment Code, the waiver will be documented by preparing a memo for the file, which will be a public document.

**Delegation of Contracting Authority to SFPUC General Manager**

The proposed ordinance delegates the Board of Supervisors' authority to enter into agreements with terms in excess of 10 years or requiring expenditures of \$10 million or more to the SFPUC General Manager. Although the contracts will be approved by the SFPUC Commission in a public meeting, the SFPUC Commission may delegate approval authority to the General Manager, subject to conditions specified by the Commission in a public meeting. If the SFPUC Commission delegates its approval authority to the General Manager, the terms of the power purchase agreements may not be visible to the public prior to SFPUC entering into the agreements.

According to Mr. Hyams, SFPUC is seeking the delegated authority for the long-term (greater than 10 years in term) contracts because they are for new projects that require an executed contract in advance of their initial contract delivery dates. These new renewable energy projects secure their financing to build the project after a power purchase agreement is in place with a buyer. In addition, SFPUC feels that it needs to act quickly to secure the best priced renewable energy in a market with limited supply and growing demand from other buyers of renewable energy due to the formation of CCA programs in California. The SFPUC will need to

contract with a number of these new projects under long-term contracts to (1) meet the City's renewable energy content goals for the program in 2019 and 2020 and (2) comply with the State Renewable Portfolio Standard regulations, which require that CleanPowerSF receive at least 65 percent of its renewable energy from projects under a contract of at least 10 years<sup>10</sup>.

#### **Practices of Other CCAs**

According to officials at Marin Clean Energy and Silicon Valley Clean Energy<sup>11</sup>, short-term (one- to two-year) power purchase agreements require a quick turnaround to execute the contracts, sometimes within a few hours of receiving the draft contract from the supplier. Officials note that it is important to maintain the confidentiality of communications with selected bidders who operate in a competitive market with multiple CCAs and large utilities such as PG&E. To facilitate this process, both Marin Clean Energy and Silicon Valley Clean Energy receive prior approval from their governing bodies to (1) allow executive staff to engage in negotiations for agreements over a certain dollar amount, and (2) use pre-approved form contracts. Silicon Valley Clean Energy notes that, although their governing board may grant permission to engage in negotiations for long-term (10- to 20-year) deals, each long-term contract must be approved by their board when negotiations are completed.

#### **Annual Reporting to Board of Supervisors**

Ordinances 75-15 and 223-15 required the SFPUC to submit annual reports to the Board of Supervisors that include annual program costs, the rates charged by SFPUC to CleanPowerSF customers to recover costs, and comparison of CleanPowerSF rates to PG&E rates. On November 22, 2017, SFPUC submitted the FY 2016-17 report on the CleanPowerSF program pursuant to Ordinance 223-15.

The proposed ordinance does not contain the requirement for SFPUC to submit annual reports to the Board of Supervisors. Therefore, the proposed ordinance should be amended to require the SFPUC to submit annual reports to the Board of Supervisors that include annual program costs, the rates charged by SFPUC to CleanPowerSF customers to recover costs, and comparison of CleanPowerSF rates to PG&E rates.

#### **Summary**

Because the proposed ordinance waives (1) standard contracting provisions required by the City's municipal codes, and (2) the Board of Supervisors authority under Charter Section 9.118, authorizing the SFPUC to enter into contracts longer than ten years or in an amount of \$10,000,000 or more without further Board of Supervisors approval, approval of the proposed ordinance is a policy matter for the Board of Supervisors. As noted above, according to interviews with an official at Silicon Valley Clean Energy, each long-term contract (10 to 20 year

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<sup>10</sup> The purpose of this requirement is to ensure that all retail sellers of electricity in California contribute to the development of new renewable energy capacity, which normally requires a long-term agreement to purchase future products from the seller.

<sup>11</sup> Marin Clean Energy and Silicon Valley Clean Energy are two of the six CCAs within PG&E service territory in California. The other four are CleanPowerSF, Sonoma Clean Power, Peninsula Clean Energy, and Redwood Coast Energy Authority.

contracts) entered into by Silicon Valley Clean Energy must be approved by their board when contract negotiations are completed.

## RECOMMENDATIONS

1. Amend the proposed ordinance to require the SFPUC to submit annual reports to the Board of Supervisors that include annual program costs, the rates charged by SFPUC to CleanPowerSF customers to recover costs, and comparison of CleanPowerSF rates to PG&E rates.
2. Approval of the proposed ordinance, as amended, is a policy matter for the Board of Supervisors because the proposed ordinance waives (1) standard contracting provisions required by the City's municipal codes, and (2) the Board of Supervisors authority under Charter Section 9.118, authorizing the SFPUC to enter into contracts of \$10,000,000 or more without further Board of Supervisors approval.

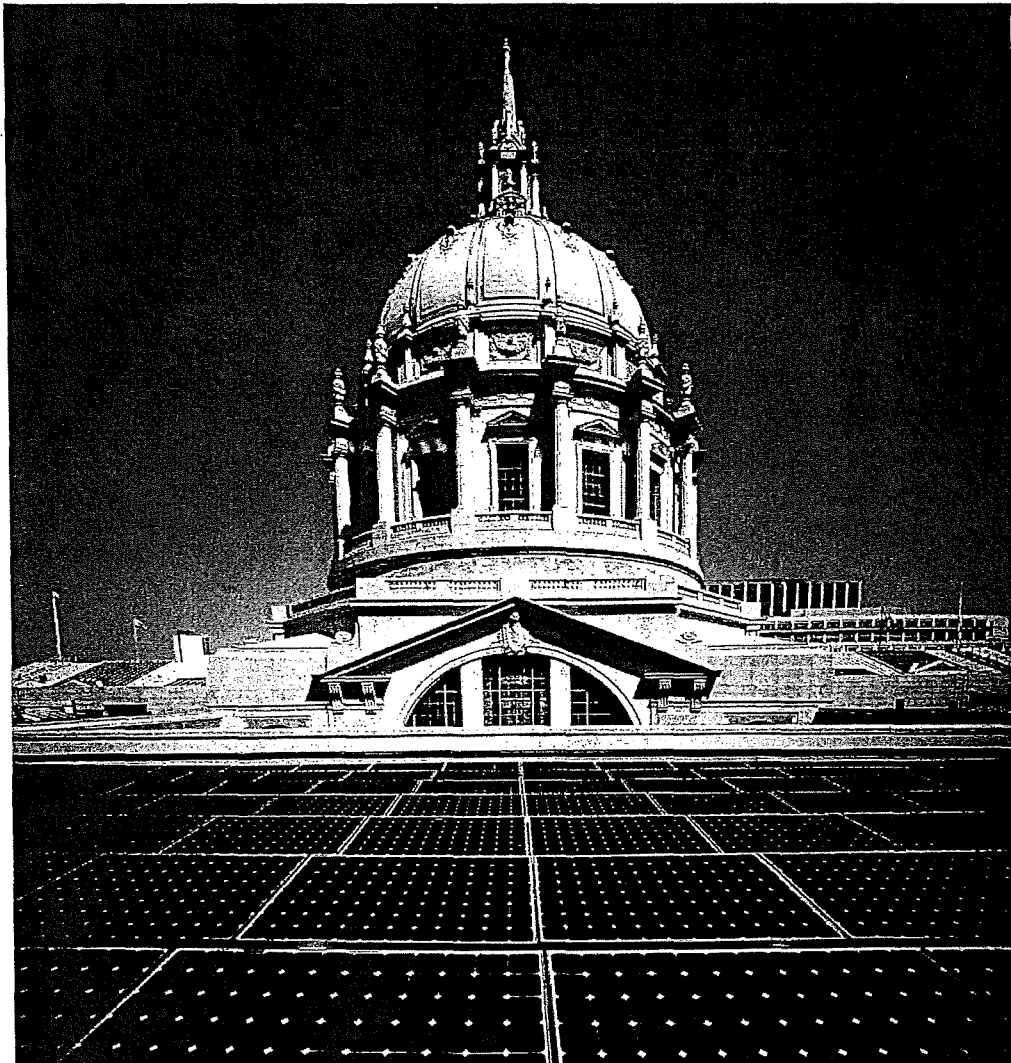




# CleanPowerSF Growth Plan

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May 2017 | Final Report



San Francisco  
**Water  
Power  
Sewer**



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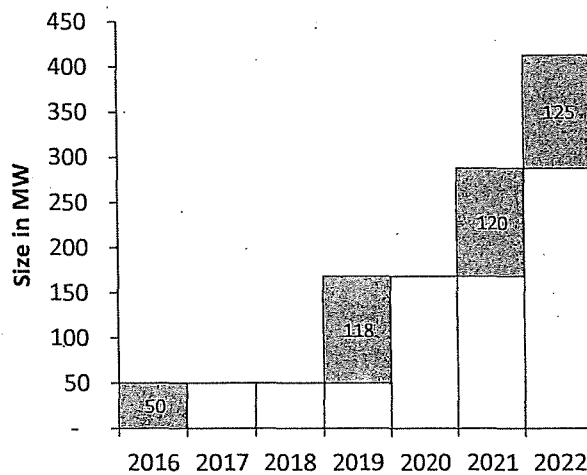
## Acronyms and Abbreviations

CARB	California Air Resources Board
CARE	California Alternate Rates for Energy
CalCCA	California Community Choice Association
CEC	California Energy Commission
CAISO	California Independent System Operator
CPUC	California Public Utilities Commission
CCA	Community Choice Aggregation
CRM	Customer Relationship Management
DA	Direct Access
ERRA	Energy Resource Recovery Account
ESP	Energy Service Provider
FFS	Franchise Fee Surcharge
FTE	Full Time Equivalent
GW	Gigawatt
GRC	General Rate Case
GHG	Greenhouse Gas
IRP	Integrated Resource Plan
ITC	Investment Tax Credit
IOU	Investor-owned Utility
KWh	Kilowatt Hour
LSE	Load Serving Entity
MCE	Marin Clean Energy
MW	Megawatt
MWh	Megawatt Hour
MDMS	Meter Data Management System
NEM	Net Energy Metering
PG&E	Pacific Gas and Electric
PCIA	Power Charge Indifference Adjustment
PPA	Power Purchase Agreement
PCC 1	Product Content Category 1
PCC 2	Product Content Category 2
PCC 3	Product Content Category 3
PGC	Public Goods Charge
REC	Renewable Energy Credit
RPS	Renewable Portfolio Standard
RFO	Request for Offers
RFP	Request for Proposals
RA	Resource Adequacy
SFPUC	San Francisco Public Utilities Commission
SCP	Sonoma Clean Power

## 1.0 Introduction: Growth Plan Purpose and Approach

In December 2015, the San Francisco Public Utilities Commission (SFPUC) Power Enterprise staff presented a Business Plan for the launch of CleanPowerSF. The 2015 Business Plan laid out the initial schedule (Figure 1) for growing CleanPowerSF beyond 2016’s planned Phase I launch of 50 MW<sup>1</sup>, showing CleanPowerSF growing in 100-125 MW blocks of average electricity demand until reaching full service of approximately 350,000 customers and 413 MW of average demand in 2022 (assuming a 20% opt-out rate).<sup>2</sup>

Figure 1: Business Plan Growth Projection (Average Demand in MW)



Guided by the Commission-adopted program goals<sup>3</sup> and Business Practice Policies (included as Appendix A-1), CleanPowerSF launched service to approximately 7,800 customers in May 2016. A second large auto-enrollment was conducted in November 2016, bringing the total Phase 1 *active* enrolled customers to approximately 75,000. In this time the program has maintained an opt-out rate of about 3.2%, and has attracted approximately 1,700 pre-enrollments and 2,350 upgrades to 100% renewable *SuperGreen* service.

With the launch of Phase I completed in November, and in response to Commission and stakeholder interest, SFPUC staff has turned its focus on planning for program growth to citywide service. ***The purpose of this Growth Plan is to determine the best options – consistent with program goals – for expediting the expansion of CleanPowerSF service throughout the City and County of San Francisco.***

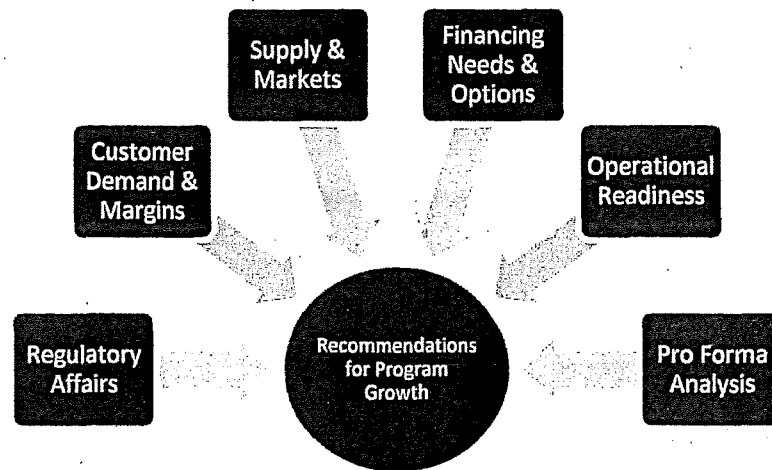
<sup>1</sup> The Business Plan projected an average program annual demand after opt-out of 50 MW in 2016, but the popularity of CleanPowerSF led to unexpectedly low opt-out rates, resulting in an average demand of 60 MW.

<sup>2</sup> The 2015 Business Plan assumed a 20% opt-out citywide, which is higher than current expectations.

<sup>3</sup> CleanPowerSF goals are: 1) Provide affordable and reliable service; 2) Develop an electricity portfolio that offers San Franciscans cleaner energy alternatives; 3) Invest revenues in new local renewable projects and jobs when feasible and cost-effective; and 4) Provide for long-term rate and financial stability.

Over the past several months, CleanPowerSF staff, supported by consultants and personnel across the SFPUC, has conducted research and analysis to determine the feasibility and best approach to program expansion. This work was divided up across a number of subject areas identified in Figure 2 below.

Figure 2: Growth Plan Approach



To complete this work, CleanPowerSF staff:

- Reviewed CCA regulatory compliance and reporting obligations;
- Analyzed electricity usage and customers in the City to better understand the economics of providing service;
- Analyzed electricity market price trends and the availability and pricing of renewable energy;
- Interviewed a number of power suppliers to better understand their interest in supplying the program, their company's approach to credit and what kinds of projects they had in their development pipeline;
- Interviewed financial institutions to understand their interest in providing financial services to CleanPowerSF and CCAs generally;
- Assessed the requirements to become operationally ready to serve more than 300,000 accounts;
- Examined the organizational structure and staffing of other operating CCAs, including functions they have prioritized for internal staffing versus functions they outsource;
- Worked internally across the SFPUC to understand program scaling requirements and timelines for developing new systems to support greater operational independence; and
- Conducted analyses to understand the total financial requirements, risks and feasibility of growth.

What follows in the sections below are staff's recommendations for expanding CleanPowerSF service citywide and detail regarding the findings of this research and analysis. A timeline for implementing program expansion is provided at the end of this report.

## 2.0 Recommendations

CleanPowerSF staff has developed the following recommendations on growth pace, processes, staffing and policies.

### 2.1 Complete Citywide Enrollment by the End of Fiscal Year 2018-2019

Enrolling all of the remaining electricity customers in San Francisco represents a significant jump in the number of accounts and energy demand to be served by CleanPowerSF (see Figures 3 and 4 below). Citywide expansion will take the program from 75,000 accounts today to approximately 350,000 accounts at full scale (more than 4.5 times the number currently served, assuming a future opt-out rate of about 10%). It will also increase program revenues from approximately \$38 million per year today to \$260 million per year at full scale (more than 6 times the amount of energy currently served).

Figure 3: Customer Count Phase 1 to Citywide

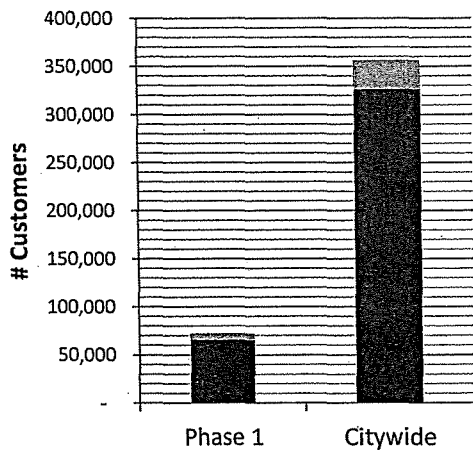
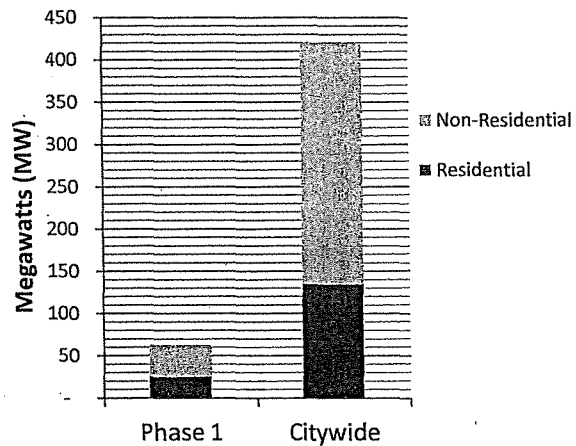


Figure 4: Program Energy Demand Phase 1 to Citywide



Staff recommends completing citywide enrollment within two years, by the end of FY 2018-2019, with the next major auto-enrollment phase to occur in May 2018. Staff has determined that May is a good month for conducting auto-enrollment because residential customers' electricity and natural gas usage is lower during this time of year, making it less likely residential customers will mistake higher PG&E energy bills with CleanPowerSF enrollment. The exact timeline for achieving full enrollment will depend on the results of staff's efforts to secure financing, additional power supplies and the ability to meet program phasing policy criteria (such as meeting or beating PG&E rates).

Just as when CleanPowerSF launched in 2016, some of these elements can only be determined after receiving bids for power supply (See Recommendation 2.3 below). Additionally, it is important to have as much certainty as possible regarding what PG&E rates will be for the enrollment period, especially the Power Charge Indifference Adjustment (PCIA). The PCIA is reset on January 1<sup>st</sup> each year, so it is prudent to conduct auto-enrollments with large numbers of customers after this date.

Staff therefore believes that two years is a reasonable amount of time to conduct the necessary procurement to serve citywide demand and acquire the staffing, consulting and other operating resources necessary to successfully execute citywide service. This timeframe will provide CleanPowerSF with some flexibility to manage power market price and supply risk<sup>4</sup>, and the lead time needed to add staff and other resources to support growing operations.

The proposed two-year timeline is notably faster than the timeline presented in the 2015 Business Plan, which projected completion of citywide auto-enrollment in 2022. Since CleanPowerSF is operating – and growing – in a dynamic environment (including changing market conditions and regulatory requirements), it is important that the SFPUC remain flexible in how it approaches program expansion. As a risk management measure, the SFPUC should be willing to slow things down if market or regulatory conditions do not warrant expansion; similarly, the SFPUC should consider speeding up expansion if opportunities arise.



Photo 1: Shiloh Wind Farm (primary source for *SuperGreen* product)

<sup>4</sup> For example, by spreading the increments of power purchased to serve the entire city over a couple of years, the program may be able to reduce the likelihood of short-term supply scarcity driving up power supply costs.



## 2.2 Issue a Request for Proposals to Acquire Third Party Financing Support

Significant additional financial resources will be required to grow the CleanPowerSF program citywide. Staff estimates that at full-scale, the credit requirements associated with program power supply could be upwards of \$60 million and fully funding the reserves (Operating Fund and Rate Stabilization Fund) will require as much as \$80 million by 2021.

CleanPowerSF has been established as a financially separate entity within the SFPUC to provide financial transparency to program stakeholders, suppliers, and the financial community and to protect the Power Enterprise from undue financial risk.

To support the financial requirements of program growth, staff proposes to issue a Request for Proposals (RFP) for third party financial services by July 2017. A key purpose of this financial support will be to secure CleanPowerSF's power purchase transactions. These services may include a variety of financial instruments such as revolving letters of credit for power supply, or a term loan for working capital. Staff plans to approach acquiring financial services in a manner that avoids any additional financial support from the Power Enterprise.

## 2.3 Issue a Request for Offers for Power Supply to Serve the Program at Full Scale

The ability to offer CleanPowerSF service citywide – on any timeline – will depend on the availability of cost-effective supplies of electricity that meet program goals. As a result, to support program service expansion citywide, CleanPowerSF staff proposes to issue a Request for Offers (RFO) for power supplies by July 2017.

The proposed RFO will seek bids to serve the program's projected demand at full scale. This will allow staff to determine whether there is sufficient power supply at cost effective prices to expand and how quickly service expansion can be completed. The solicitation will also seek bids from both operating and new, or to-be-constructed, renewable energy plants. Ultimately, a goal of the program is to develop new renewable energy resources. If the solicitation returns insufficient renewable energy from operating projects, the program can focus on developing new projects to meet customer demand. Future customer enrollments can then be synchronized with the dates that new renewable energy resources come on-line.

Based on research and discussions with suppliers and project developers, staff believes that it is possible to acquire the energy needed to significantly expand CleanPowerSF service next year. However, the exact scale of growth will be dependent on the amount of *cost-effective* renewable and GHG-free energy available in the market in the next 12-36 months. Due to the significant volume of renewable energy that CleanPowerSF will be seeking to acquire, staff believes that it is prudent to see what the renewable energy market can provide in the near-term before committing to a specific enrollment schedule.

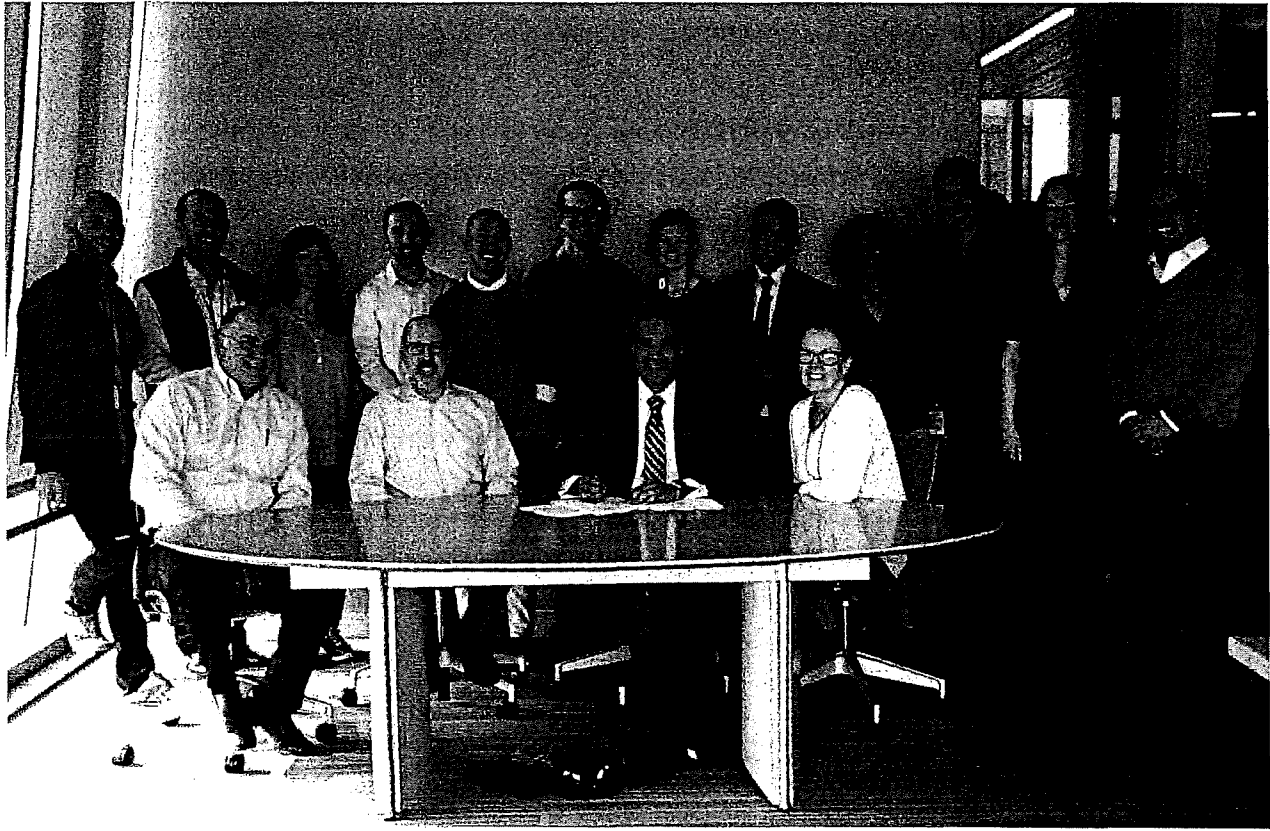


Photo 2: CleanPowerSF Signs First Power Supply Contracts

#### 2.4 Adopt a Goal of 50% Renewable Energy for the Default *Green* Product by 2020

In December 2015, the Commission adopted a Portfolio Content Policy for the CleanPowerSF program establishing a goal of providing 35% renewable energy content for the default *Green* product of at program launch. CleanPowerSF exceeded that goal in 2016 by delivering 40% renewable energy in its *Green* product. Increasing San Francisco's reliance on renewable energy, and eliminating greenhouse gas emissions from the electricity supply serving San Francisco by 2030, is a City goal, and a goal of the CleanPowerSF program.<sup>5</sup> Moreover, increasing the program's renewable energy content, while remaining competitively priced, is central to the program's value proposition to customers.

To provide CleanPowerSF program with a portfolio content target that helps it maintain its competitive position and provide value to San Francisco, staff recommends the SFPUC adopt a goal for the *Green* product of 50% renewable energy content by 2020. Research conducted during this growth planning process points to the likely availability of renewable energy supply in California to support this objective, if action is taken immediately to begin engaging with the renewable energy suppliers.

<sup>5</sup> Board of Supervisors, "Greenhouse Gas Emissions Reduction" Resolution (158-02) and Ordinance 8108, San Francisco Environmental Code § 902

In addition to helping the City combat climate change, meeting the program's renewable energy goal will be the major driver of new clean energy job creation. Sourcing more renewable energy within California will create jobs in the construction and operation of renewable power plants. Staff has estimated 1,300 to 5,000 jobs may be created over the next 4 to 5 years to support CleanPowerSF's achievement of the proposed 50% by 2020 renewable energy goal.<sup>6</sup> The ultimate number of jobs created will depend on the amount of energy sourced from new versus operating renewable energy plants.

## **2.5 Staff up to Run the Program Successfully Adding Staff to Core Functions Immediately**

Finally, to support all of the operating and customer service needs of the program, CleanPowerSF will need to staff up. Citywide service will significantly increase CleanPowerSF's power supply requirements, and adding staff resources to procure and manage those contracts will be critical to success.

In the near-term, staff proposes focusing hiring on functions that are most immediately critical to the success of the program:

- Energy Supply Portfolio Management
- Power Settlements
- Risk Management
- Regulatory and Legislative Affairs
- Account Management
- Customer Service

Staff has identified 14.5 full time equivalent (FTE) positions are needed immediately to support additional customer enrollment in May 2018. The addition of these positions would bring total CleanPowerSF-funded staff to 30 FTEs. Professional services contractors will also be needed to fill gaps in the near and medium-term.

Under this plan additional staff would be onboarded over the balance of the enrollment period, bringing CleanPowerSF funded positions to an estimated 50-55 FTEs. This staffing projection is consistent with MCE, the most mature CCA program operating in California, which has about 40-45 FTEs, and whose program sales are a bit lower than what is expected for CleanPowerSF at full scale.

## **2.6 Work with Stakeholders to Develop Initiatives that Support Low Income Participation**

The CleanPowerSF program endeavors to offer cleaner electricity at stable rates that are affordable and competitive with PG&E's electricity rates for comparable service. Additionally, CleanPowerSF is

<sup>6</sup> This projection assumes 20-80% of CleanPowerSF's renewable energy is sourced from newly constructed renewable plants.

committed to ensuring that all members of the community, regardless of income, have the opportunity to participate and receive the benefits of cleaner electricity service.

There are a number of options available to the City and the SFPUC to facilitate program participation from low-income members of the community. Examples include, but are not limited to:

- (1) prioritizing rate stabilization funds for qualifying low-income customers;
- (2) allowing CleanPowerSF customers or private companies doing business with the SFPUC, as part of a community benefits package, to donate to an “angel fund” to help low-income customers receive cleaner energy with either CleanPowerSF’s *Green* or *SuperGreen* service; and
- (3) providing targeted energy efficiency services to low-income customers to help them reduce their overall energy bills, making it easier for them to participate in CleanPowerSF.

Staff recommends working with stakeholders to identify and develop new initiatives that support low-income participation in the CleanPowerSF program. Staff recommends this work be undertaken in FY 2017-2018 so that new programming and policies can be available by the time CleanPowerSF completes citywide enrollment.



Photo 3: CleanPowerSF Net Energy Metering (NEM) Community Workshop

### 3.0 Detailed Findings

The findings that led to these recommendations are detailed below, organized by research and analysis conducted in the following areas:

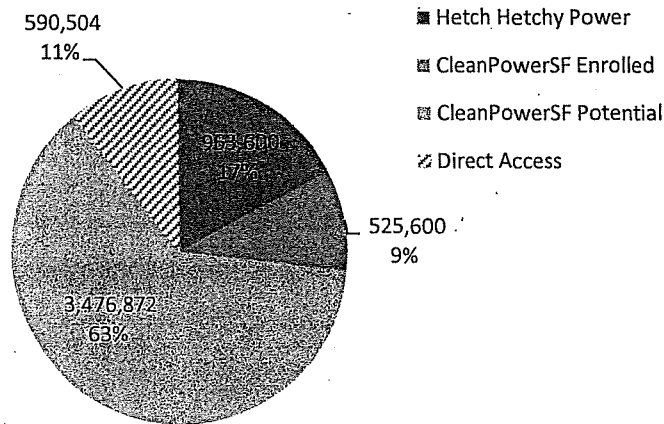
- Customer Makeup & Demand
- Power Supply & Markets
- Financing Needs & Options
- Operational Readiness
- Regulatory and Legislative Affairs
- Pro Forma Financial Analysis

#### 3.1 Customer Makeup and Demand

For the purpose of planning program growth and configuring enrollment phases, it is critical to understand the potential energy demand and characteristics of the full potential customer base to be enrolled. Electricity usage in San Francisco varies by customers class, as do the rates PG&E charges for generation service. This is important because the cost to serve different customer classes varies, as does the revenue potential for CleanPowerSF, given the goal of offering affordable and competitive rates compared to PG&E.

Figure 5 shows San Francisco’s total electricity consumption of more than 5 million megawatt-hours (MWh) annually.

Figure 5: Average MWh Usage (MWh, %)



For purposes of this plan, CleanPowerSF’s total potential customer base is the sum of the customers currently enrolled (shown in the bright green pie slice), and customers currently purchasing power generation through PG&E’s bundled service (shown in the grey pie slice). Together, these slices total approximately 4 million MWh annually – or about 460 MW of average demand (i.e., before opt-out is calculated for future enrollment). Customers already served by the SFPUC’s Hetch Hetchy power are public power customers and are not eligible for CleanPowerSF enrollment. Direct Access (DA) customers are eligible for CleanPowerSF, by

statute, but auto-enrolling may not be the best strategy to attain them. DA customers receive service under contract with third party Energy Service Providers (ESPs). Auto-enrolling these customers could break their ESP supply contracts and may imperil their ability to return to DA service, participation in which is capped and currently has a waiting list for new participants. The CleanPowerSF team is proposing that DA customers be enrolled only at a customer’s request or otherwise held out of the program’s auto-enrollment plans until all other eligible customers have been enrolled.

3.1.1 CleanPowerSF Potential Customer Overview

As shown in Figures 6 and 7 below, 91% of the City’s eligible CleanPowerSF accounts are residential (green slices of the pie), but these accounts represent only 31% of the total citywide energy usage. In contrast, commercial and industrial customers represent 9% of all accounts, but make up 68% of the total CleanPowerSF potential energy demand.

Figure 6: Electricity Accounts

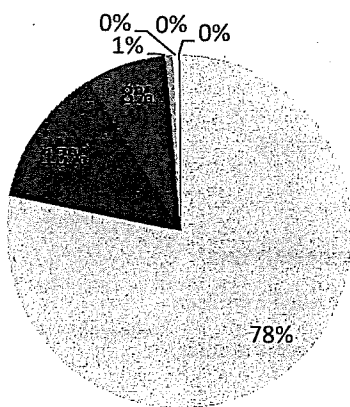
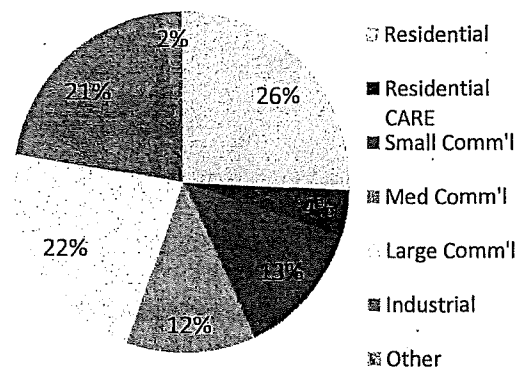


Figure 7: Electricity Usage



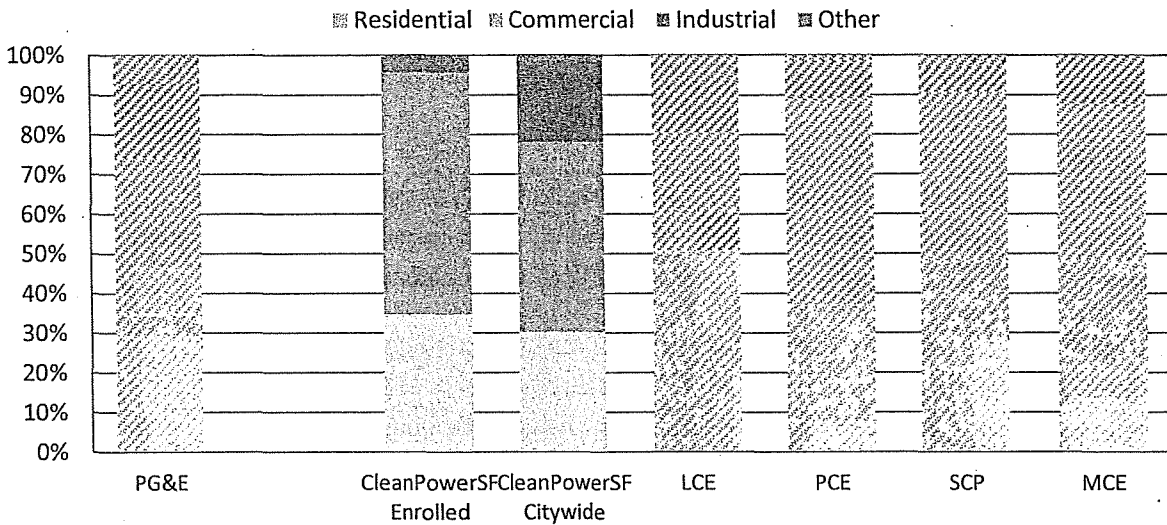
3.1.2 Comparing Customer Makeup with other Load Serving Entities

Identifying how the CleanPowerSF potential customer mix compares to the makeup of other load serving entities (LSEs) is helpful in understanding the implications for program design and financial performance of adding more customers and potentially changing the customer class composition of the program.

Figure 8 below shows that CleanPowerSF’s citywide potential customer composition and energy sales vary somewhat from other entities in that its customer base is less residential and has a higher percentage of commercial and industrial usage. CleanPowerSF’s citywide potential energy sales vary slightly from CleanPowerSF current enrollment in that it is slightly less residential, and significantly more industrial.



Figure 8: Customer Class Distribution by Load Serving Entity



Under state law, a CCA must offer service to all residential customers in its service territory. Figures 9 and 10 below show that CleanPowerSF is expecting an average annual use per residential account of just over 3,700 kWh in Phase 1 and 3,500 kWh once citywide residential enrollment is complete. On average, San Francisco residents use 35-55% less electricity than the residential customers of the other operating CCAs, which feature average per-household consumption of 5,300 to 7,900 kWh per year.

Figure 9: Energy Usage Per Account: Residential Customers

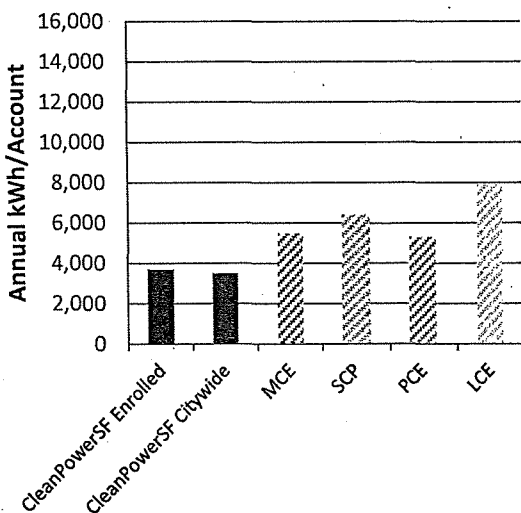
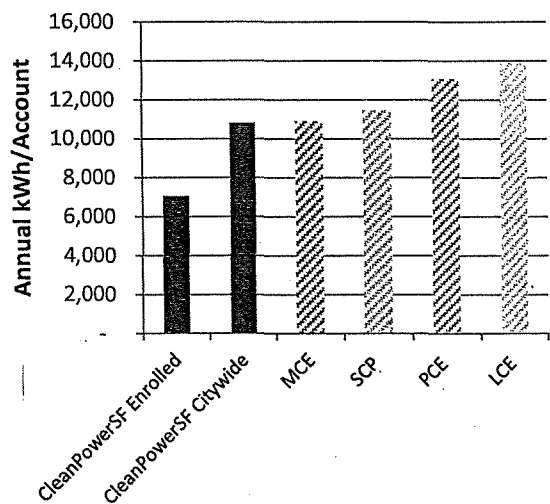


Figure 10: Energy Usage Per Account: All Customers



While this is great news from an environmental sustainability perspective, it makes fixed costs a higher portion of the per kilowatt-hour revenues, diminishing net revenue available for other

purposes (e.g., reserves, build-out, etc.). This is an important takeaway since non-residential enrollment is optional – but this analysis shows that it is desirable. The counterpoint to this takeaway is that non-residential customers carry with them more sales when they opt-out of the program, which can impose greater risk of revenue loss.

**3.1.3 Customer Rate Analysis**

By analyzing data on the number of accounts, average per-account energy use by customer class, and PG&E generation rates for CCA-eligible San Francisco electricity customers, staff evaluated the financial impacts to CleanPowerSF of enrolling different customer types.

Figure 11 below shows a high-level comparative analysis conducted using the CleanPowerSF Phase 1 average *Green* Product rates by rate class. Each bar in the chart represents the average generation rate to a CleanPowerSF customer in the identified customer class (using rates in place at the time of program launch on May 1, 2016). The first bar represents the average rate to all customers currently served by CleanPowerSF. The variation across the classes seen below can be explained by (1) variation in PG&E’s PCIA charges across rate classes, (2) variation in rates by customer class, and (3) variation in costs by rate class due to fixed per-account costs. The PCIA is included to show the total generation rate as seen by the customer.

**Figure 11: Average *Green* Product Rate to Customer by Rate Class**

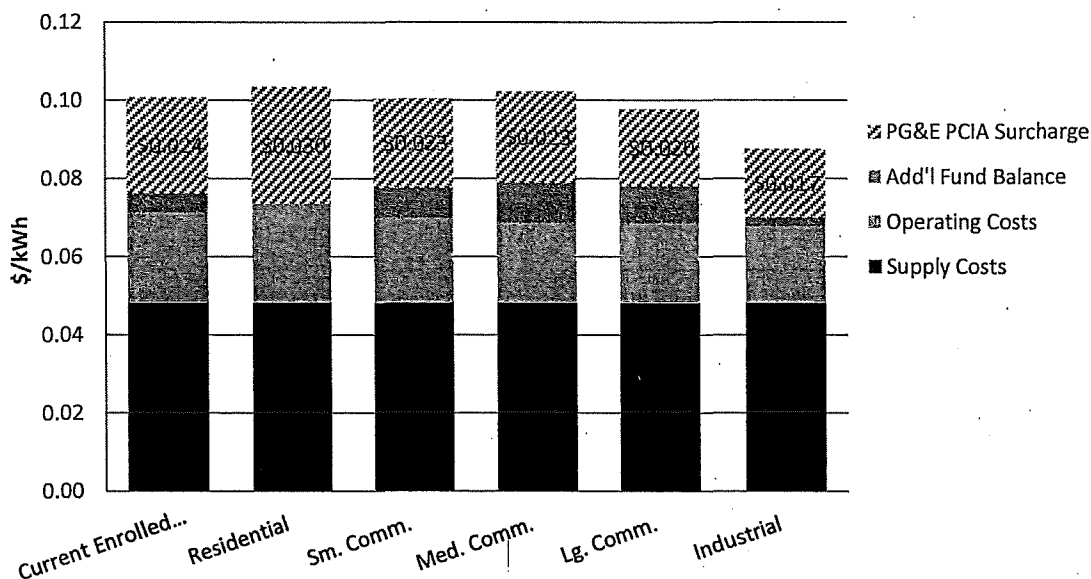


Figure 11 indicates that there are financial benefits to mixing residential enrollment with customer classes from which higher per kilowatt-hour revenues are expected—specifically, small and medium commercial and to some degree large commercial classes. The above also suggests that no single customer class poses a critical financial risk; rates recover costs for all classes.



However, this could change in the future if CleanPowerSF must lower its generation rates to remain competitive.

### *3.1.4 Customer Considerations for Program Outreach and Communications*

As CleanPowerSF plans future auto-enrollments, it will also be critical to consider how the program will communicate with customers and whether outreach efficiencies might be gained. From the perspective of communications and enrollment management:

- **Organizing phases by geography rather than by customer class allows for more efficient outreach.** Combining residential and non-residential rollout in a District where possible maximizes the value of advertisements/canvassing and simplify communications and mailing efforts.
- **Territories in which residents and businesses express the most favorable outlook on CCA service and clean energy should be prioritized for auto-enrollment phases.** This guidance was considered in the selection of geographic areas to be included in Phase 1, and Phase 1 has achieved a lower-than-expected opt-out rate.
- **Readiness to communicate in key languages may be a reason to advance or hold off on enrolling a certain territory.** CleanPowerSF is currently staffed for Spanish-speaking outreach, but will need new staff resources for Chinese-speaking outreach to serve Chinatown in District 3, and Districts 1 and 4.
- **CleanPowerSF should consider direct outreach to the largest customers.** Large accounts are unique; they require additional account management services, have a greater impact on energy supply procurement planning, and may benefit from their own enrollment schedule. Due to their large energy usage, these accounts pose the greatest opt-out risk to the program. As CleanPowerSF prepares for additional phases, staff recommends delaying the auto-enrollment of the largest customers until staff can conduct separate outreach to better understand their interest and likelihood to stay in the program.

### *3.1.5 California Alternate Rates for Energy (CARE) Customers*

Approximately 13% of San Francisco's electricity accounts are enrolled in the California Alternate Rates for Energy (CARE) program. The CARE program offers discounted electricity service to qualifying residential and commercial customers.<sup>7</sup> Customers enrolled in CleanPowerSF continue to receive the same discount as PG&E bundled customers because it is applied to the distribution portion of the electric bill.

Managing year-over-year changes in PG&E's CCA exit fee (the Power Charge Indifference Adjustment, or PCIA) can make it challenging to ensure that CARE customers pay no more for service with CleanPowerSF than they would with PG&E. For example, on January 1, 2017, PG&E increased the PCIA it charges to customers by 25% for residential customers (increasing the per-

<sup>7</sup> For more information on the CARE program, see: <http://www.cpuc.ca.gov/esap/>

kilowatt hour rate from 2.4 cents to 3 cents). Even though CleanPowerSF's rate did not change over this time period, the increase in PG&E's PCIA meant CleanPowerSF customers were paying about 2% more on their total bills.<sup>8</sup> If CleanPowerSF were serving all CARE customers and wanted to reduce rates to prevent CleanPowerSF service from costing more than PG&E bundled service, it would have cost the program approximately \$1 million per year to do so (assuming no further change).

To protect CARE customers from increased costs associated with PCIA increases mid-rate cycle, the SFPUC can prioritize the use of its rate stabilization funds for CARE customers. The SFPUC can also develop angel funds or other mechanisms that allow non-CARE customers in San Francisco to contribute through an on-bill mechanism toward additional rate protection or discounts.

### Customer Makeup and Demand Findings

- ✓ **A diverse customer mix is important:** While costs and revenues vary across customer classes, no customer class is expected to be uneconomic to serve at today's rates and operating costs. Enrollment of commercial customers will help balance the narrower margins (and higher per account fixed costs) expected of residential customers.
- ✓ **Enrolling CARE customers may require additional rate protections:** Prioritizing the protection of CARE customers requires financial reserves – which may be reason to allow time for reserve fund building and planning prior to auto-enrollment of CARE customers.
- ✓ **Geographic enrollment can provide communications efficiencies and support customer class diversity:** Enrollment of customers by Supervisory District, rather than by rate class, will provide outreach/communications efficiencies and will also help to balance revenues by enrolling a mix of customer classes.
- ✓ **Staff should engage in direct outreach to the largest commercial customers and DA customers prior to enrollment:** Due to the significant amount of energy they use per account, delaying enrollment of the largest commercial accounts until direct outreach can be conducted is advisable. Customers on Direct Access should be treated similarly since auto-enrollment could affect their DA participation and eligibility. Staff can continue to support pre-enrollment of these accounts while it staffs up to conduct the more targeted outreach required for large commercial and DA accounts.

<sup>8</sup> On April 11th, the SFPUC adopted new rates for CleanPowerSF, making them lower than PG&E even after accounting for PG&E's PCIA and FFS charges. The SFPUC's rate reduction, which goes into effect on July 1, 2017, ensures customers are paying no more for their electric service even after accounting for PG&E's higher fees.

## 3.2 Power Supply and Markets

The CleanPowerSF Phasing Policy requires power supply to be sufficient to meet projected new customer demand. Thus, to allow for citywide expansion, CleanPowerSF must develop an energy supply portfolio to serve its full customer base while meeting its other goals, including affordability and clean energy content. CleanPowerSF must determine the price and availability of various renewable and other energy sources, and the legal and regulatory requirements for energy supply as a load serving entity (LSE), in order to plan a supply portfolio and procurement strategy that best serves its customers and meets its goals.



Photo 4: City Hall (powered by Hetch Hetchy Power) At Night

### 3.2.1 Product Content

For its May 2016 launch, the CleanPowerSF Product Content Policy set a target renewable content for the default *Green* energy product of 35%. The Policy also set forth a goal of relying on Product Content Category 1 (PCC 1) renewable resources to the extent that it is economically and financially feasible – meaning that Renewable Energy Credits (RECs) purchased for the program are "bundled" with their underlying electricity and delivered directly into a California electric balancing authority area. As of the end of 2016, the *Green* product is 40% PCC 1 renewable and 76% GHG-free, exceeding the goals initially set.

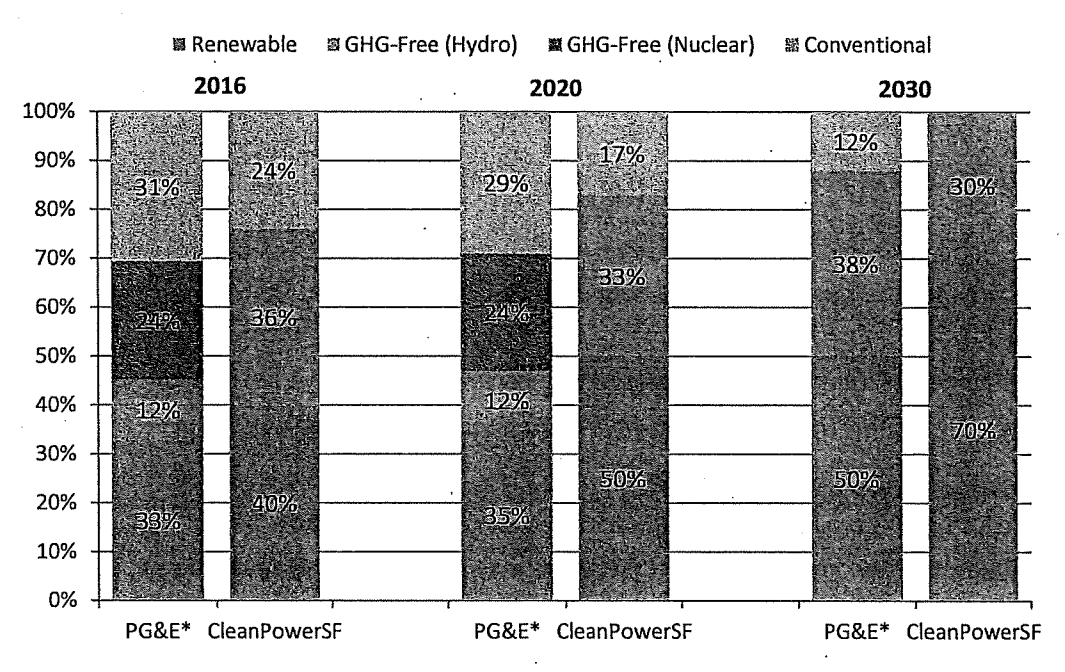
CleanPowerSF is currently unique among operating CCAs for supplying all its renewable energy to-date through PCC 1-compliant renewable energy. It is important to note that these resources come at a significant premium over other Product Content Categories (discussed further below).

For purposes of this growth plan, CleanPowerSF created a baseline projection of the program’s default *Green* product renewable and GHG-free content minimum targets for the CleanPowerSF supply portfolio (Figure 12). The annual targets are intended to achieve the power content objectives:

- Maintain renewable content minimums that are at least 10% above a pro-rata of PG&E’s state requirement of 50% renewable by 2030;
- Achieve a renewable content that is 50% renewable by 2020; and
- Reduce the GHG-emitting power content each year to achieve San Francisco’s goal of a 100% GHG-free electricity supply by 2030.

As Figure 12 indicates, the resulting renewable energy target is at least 70% by 2030. The remaining 30% of the portfolio is assumed to be sourced from GHG-free hydroelectric or additional renewable energy supplies.

**Figure 12: Comparison of PG&E and CleanPowerSF Power Content Projection**

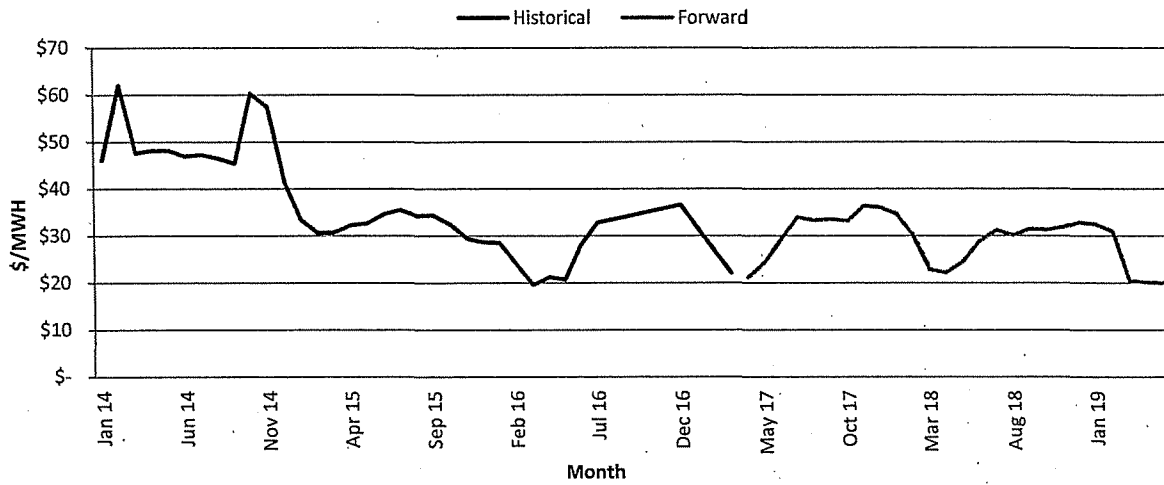


\*PG&E data interpolated using PG&E’s 2016 Form 10-K filing, California RPS targets and Table 2-3 of PG&E’s Testimony in the Diablo Canyon Application (A.16-08-006)

### 3.2.2 Observations in the Wholesale Electricity Market

A review of California Independent System Operator (CAISO) wholesale electricity prices indicates that, on average, prices have been on a decline in recent years. Current forward price curves indicate that wholesale market prices are expected to stay in the \$20-40 range over the next couple of years.

Figure 13: Historical and Forward Wholesale Energy Prices (CAISO NP15)



Source: California ISO OASIS (historical data) at: <http://oasis.caiso.com/mrioasis/logon.do>; ICE Reports (forward data) at: <https://www.theice.com/marketdata/reports>

The decreasing price trend that can be observed in Figure 13 is attributable to a number of factors, including: 1) significant amounts of new renewable energy capacity (mostly solar) coming on-line in recent years, 2) historically low natural gas prices driving down the cost of natural gas-fired electric generation, and 3) more hydroelectric supply in California in 2015 and 2016 than in the previous two years.

As shown in Figure 13, there is also a seasonal trend to wholesale electric pricing. Generally speaking, lower prices are found in spring (with hydroelectric resources coming on the market) and higher prices in late summer due to higher statewide energy use. In 2016, this meant wholesale prices trending primarily within \$20-\$40/MWh in the day ahead market (at the NP-15 trading hub); however, more instances of negative pricing are occurring during certain hours of the year due to the increasing amounts of variable renewable generation.

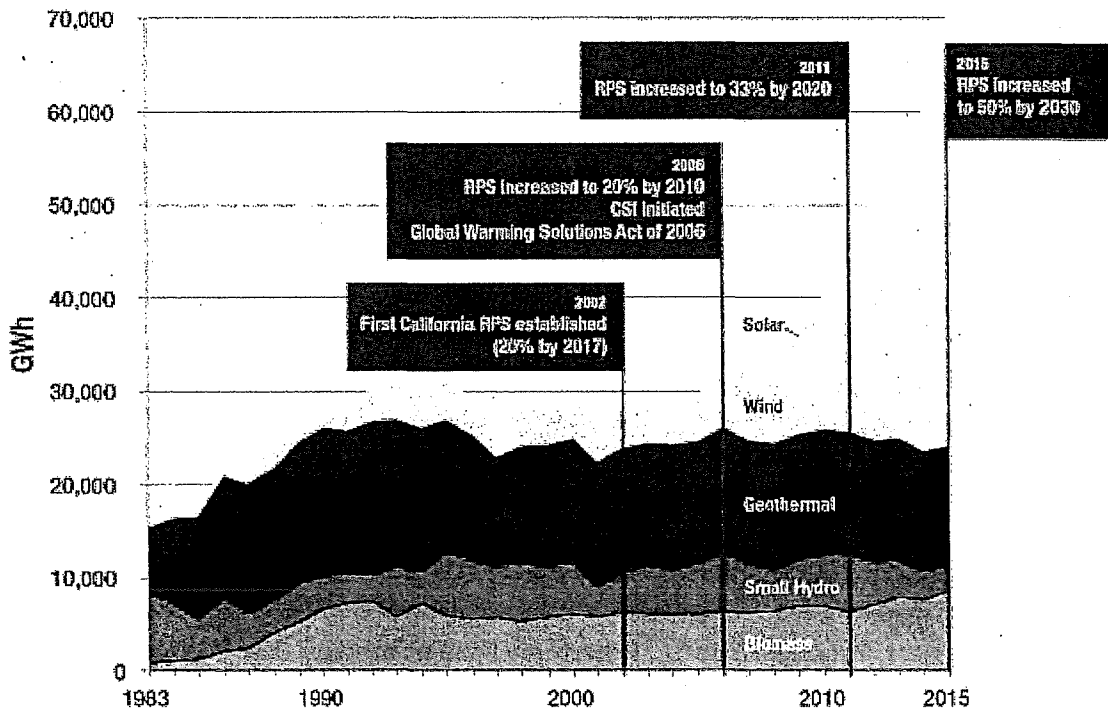
Low prices can mean it is a good time to be a buyer in the wholesale electricity market. Lower wholesale prices mean cheaper energy for consumers and lower credit and collateral thresholds for wholesale buyers, like CleanPowerSF. However, all else being equal, low wholesale prices can also drive down retail generation rates and are a major contributor to an increasing Power Charge Indifference Adjustment (PCIA), as the resources in PG&E's portfolio become more expensive relative to their market value. An increasing PCIA can greatly reduce the amount of revenues CleanPowerSF may generate while remaining competitively priced vis-à-vis PG&E.

*Pricing and Availability of Premium Products: California Renewables*

As new CCAs come on-line and seek to serve their ratepayers with greater renewable energy content, CleanPowerSF must consider whether this increased demand for renewable energy products will challenge supply and drive prices upward.

Renewable supply tracking by the California Energy Commission (CEC) indicates that renewable energy supply has been exceeding the projected demand associated with RPS compliance. As of October 2016, CEC tracking shows that California is ahead of schedule for meeting the RPS requirements. In-state renewable capacity has almost quadrupled between 2001 and 2016, increasing from 6,800 MW to 23,600 MW over that time span. Furthermore, approximately 10,600 MW of new renewable capacity is currently permitted and either in construction or pre-construction. As one would expect, renewable energy production has also been on a rapid rise over this time period as shown in Figure 14 below.

**Figure 14: Renewable Energy Production in California 1983-2015**



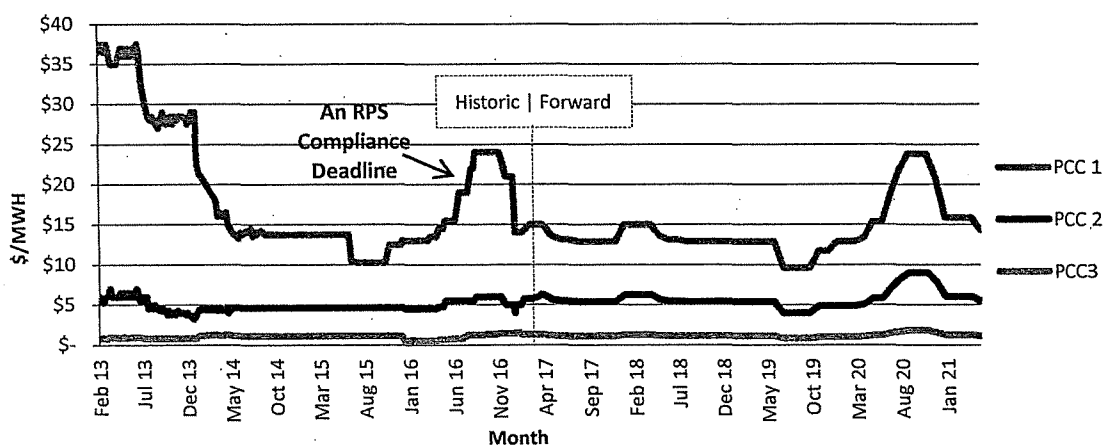
Source: California Energy Commission, "Tracking Progress," available at: [http://www.energy.ca.gov/renewables/tracking\\_progress/#renewable](http://www.energy.ca.gov/renewables/tracking_progress/#renewable)

The renewable capacity growth figures noted above suggest that developers have scaled renewable capacity quickly in response to market demands. Furthermore, CleanPowerSF staff discussions with renewable energy developers indicate that significant additional capacity can be

developed. This has led to the conclusion that access to renewable energy supply sufficient to meet CleanPowerSF’s ambitious goals is not an obstacle.

As noted above, CleanPowerSF’s Product Content Policy set forth a goal of relying on PCC 1 renewable resources, to the extent feasible. To date, CleanPowerSF has fulfilled this goal, procuring its renewable energy using only PCC 1 products. However PCC 1 renewable energy products come at a significant premium over other Product Content Categories (PCC 2 and PCC 3). Some of this premium can be mitigated through careful supply portfolio planning that avoids the need to purchase prior to compliance deadlines, when prices are highest (shown in Figure 15).

Figure 15: Spot Renewable Energy (REC) Prices (Historical and Future)



*Existing Renewables*

Recent reports (as of October 2016) indicate that wholesale renewable energy resources in Northern California total 6.9 gigawatts<sup>9</sup> (GW), or approximately 35% of the state’s total renewable energy capacity. Of that, 3.0 GW, or about 14% of the state’s renewable capacity, is located in the 9-county Bay Area (See Table 1 below).<sup>10</sup>

Table 1: Comparison of Statewide, Northern California and Bay Area Renewable Resources

Technology / Fuel Type	Wholesale Renewable Capacity					
	All California		Northern California		9-County Bay Area	
	MW	%	MW	%	MW	%
Biomass	1,328	6%	780	11%	63	2%
Geothermal	2,716	11%	1,998	27%	1,238	41%

<sup>9</sup> A gigawatt is 1,000 megawatts and 1,000,000 kilowatts

<sup>10</sup> See the California Energy Commission, Tracking Progress – Renewable Energy, available at: [http://www.energy.ca.gov/renewables/tracking\\_progress/documents/renewable.pdf](http://www.energy.ca.gov/renewables/tracking_progress/documents/renewable.pdf)



Small Hydro	1,764	9%	1,261	17%	3	<1%
Solar PV	8,171	39%	1,646	22%	141	5%
Solar Thermal	1,257	6%	-	0%	-	0%
Wind	6,053	29%	1,721	23%	1,593	52%
<b>% of Statewide Total</b>		<b>100%</b>		<b>35%</b>		<b>14%</b>

The types of available renewable energy vary by region as well; existing renewable capacity in the 9-county Bay Area is dominated by wind and geothermal (mostly the Geysers in Sonoma and wind in Altamont Pass and Solano County). Areas of Northern California outside the Bay Area and Southern California have much greater concentrations of solar and small hydro resources.<sup>11</sup>

It is important to note that local renewables tend to come at a price premium over renewables sourced from other parts of the state.<sup>12</sup> There are a number of reasons for this including, but not limited to: 1) limited space in densely populated areas reduce the scale economies that can be achieved, especially from solar; 2) higher property values increase project land costs; 3) higher regional wages increase project labor costs; and 4) the renewable resource may be more productive elsewhere (e.g., solar radiation is 22% better in Lancaster, California than in San Francisco).<sup>13</sup> In addition, with the number of CCAs existing and forming in the Bay Area, and the tendency for these CCAs to express a preference for local energy supply, one would expect greater competition for limited supplies, which could drive up prices further. All of this suggests that CleanPowerSF must have a flexible approach to sourcing its renewable energy supply, balancing the potentially higher cost of local renewable energy sources against the lower cost of renewable energy produced in other areas of the state.

### 3.2.3 Contract Credit and Collateral

Credit provisions are an important element of wholesale power purchase agreements, specifying the agreed-upon protections against the risk of default by parties to the agreement. Credit provisions for wholesale power contracts often include posting of collateral in the form of a letter of credit, cash deposit, or other form of mutually agreed-upon security.

Securing energy supply contracts can be a significant cost to a new CCA program that does not have a credit rating. The cost of posting collateral was a constraint on the size of CleanPowerSF's Phase 1 launch, and is expected to be a factor in the pace of future growth.

<sup>11</sup> See MRW & Associates, "Technical Study for Community Choice Aggregation Program in Alameda County," available at: <https://www.acgov.org/cda/planning/cca/documents/Feas-TechAnalysisDRAFT5312016.pdf>

<sup>12</sup> For example, MRW & Associates recently estimated a 15% premium for solar projects located in Alameda County.

<sup>13</sup> Average annual solar radiation is 5.27 kWh/m<sup>2</sup>/day at SFO International Airport and 6.44 kWh/m<sup>2</sup>/day in Lancaster, CA. See PVWatts Calculator at: <http://pvwatts.nrel.gov/index.php>



Research indicates that as it grows, CleanPowerSF will likely find lower collateral requirements in comparison to those encountered in the 2015-2016 supply contracting for Phase 1 and anticipated in the 2015 Business Plan. This is due to many factors, including increased familiarity of power suppliers with CCAs and a demonstrated CleanPowerSF track record.

The amount and form of collateral required of a CCA can vary based on the financial standing of the CCA and a number of other factors, described further in the Financing section below. However, collateral requirements also tend to vary with contract type. Through conversations with suppliers, staff has found that collateral requirements are typically greater for conventional energy supply contracts that offer firmed or shaped energy, and/or additional ancillary energy services, and may be minimal for long term contracts with developers of renewable resources. Ultimately, collateral posting needs will tie to contract volume and length, making having a narrow open position for an extended period of time (e.g., fixing a large part of supply for multiple years) more costly from a supply financing perspective.



Photo 5: CleanPowerSF Billboard in District 5

### 3.2.4 Portfolio Management and Open Position

As CleanPowerSF grows from a 60 MW program to a 400+ MW program, its supply portfolio – and associated contracting needs – will also grow. The size of the program is not the only reason for growing contracting needs; CleanPowerSF will seek to diversify its portfolio as it moves from mostly short-term (3 years or less) conventional and short-to-medium term (5 years or less) renewable agreements, to long-term (10 year or more) renewable and local development agreements.

CleanPowerSF’s general approach to supply management is to diversify its supply portfolio across suppliers, technologies, project size and location, price terms, and contract tenor. This diversified procurement strategy will result in relatively fixed pricing for CleanPowerSF’s customers over the short- and intermediate term. Such a portfolio structure is consistent with the stated preferences of customers, who generally are averse to price volatility, even if prices are slightly higher on an expected value basis.

The following figure presents a stylized portfolio and hedging structure for a 10-year forward projection of the CleanPowerSF supply portfolio (at full scale).

Figure 16: Stylized Resource Portfolio and Hedging Structure

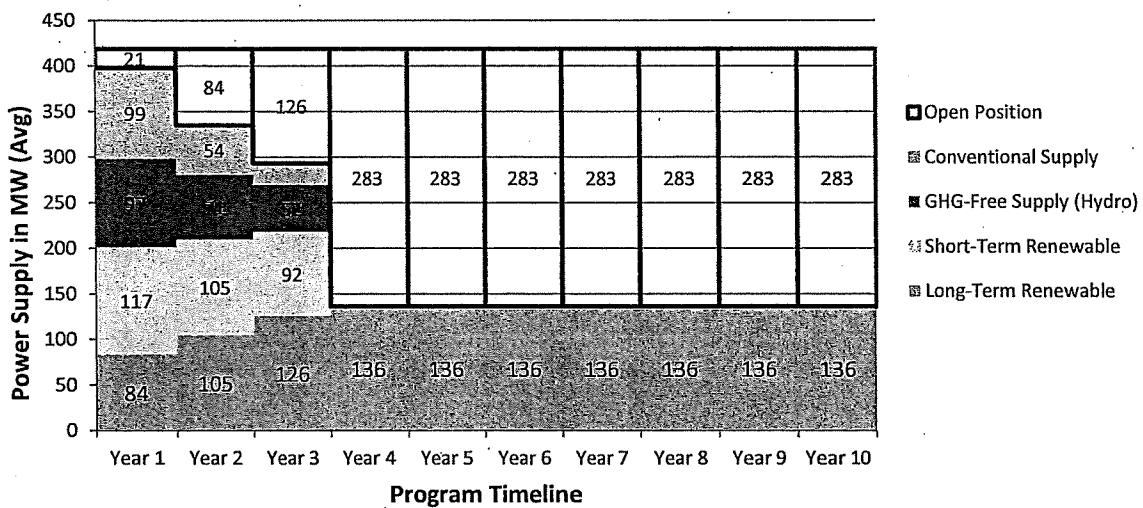


Figure 16 shows the resource types and the tenure of contracts that CleanPowerSF would secure to meet its program supply content, regulatory requirements and rate objectives. The laddered portfolio structure reflects a forward contracting position of 95% of the upcoming year’s (Year 1) supply requirements, minimizing CleanPowerSF’s exposure to short-term price volatility. In this example, the forward commitment would step down to 85% of the supply requirement for Year 2, 70% for Year 3, and 33% for Years 4-10. Laddering contracts means that power will be procured using staggered, multi-period contracts instead of through a single contract, or several contracts that expire all at once, creating significant market exposure. It also means that CleanPowerSF will conduct energy supply procurements each year to fill future open positions. This type of supply portfolio structure is common in deregulated electricity markets and is consistent with what CleanPowerSF staff have observed as a best practice among other operating CCA programs.

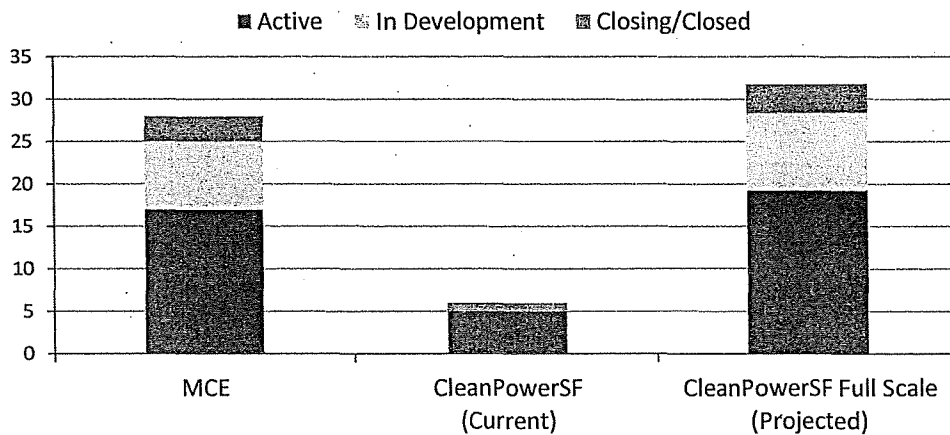
*Expected Number of Contracts*

Based on market research and studies previously conducted by the SFPUC on renewable energy potential in San Francisco and SFPUC properties, it is expected that renewable energy projects developed locally will be smaller in scale than projects developed elsewhere in California. The

program’s goal to spur local renewable energy development combined with the smaller expected size of local projects will likely result in a greater number of contracts required to supply the program. As noted earlier, CleanPowerSF will also seek to diversify across technologies, geography, and suppliers to manage risk, further increasing the potential number of supply contracts it may execute.

To illustrate the number of supply contracts CleanPowerSF may execute as the program grows, Figure 17 shows a breakdown of MCE supply contracts by contract status (active, in development, closing).

Figure 17: Number of Energy Supply Contracts



Drawing from MCE’s 2015 IRP update and recent press releases, CleanPowerSF identified 28 contracts that are either active, negotiated/in development, or closed/closing that MCE is using to serve the approximately 365 MW of average demand of its 255,000 customers. If CleanPowerSF were to similarly contract for its total projected load of 400+ MW, the program could expect to have a total of 19 active/producing contracts, another 9 contracts negotiated/under construction, and another 3 closing at any given time. This number may ultimately be higher or lower depending on the number of contracts CleanPowerSF executes with small-scale projects (e.g., feed-in tariff).

Assigning sufficient staffing resources to energy supply contracting and portfolio management will be critical, as will be the development of a regular Integrated Resource Plan (IRP) process (underway now and expected in summer 2017).



Photo 6: CleanPowerSF at Earth Day SF 2017

### *3.2.5 Spurring Local Development*

CleanPowerSF is committed to investing in the creation of new, preferably local renewable generating capacity and promoting demand-side efforts, including energy efficiency and conservation programs.

#### *Supply-Side Local Development*

A number of options exist to spur the development of local renewable energy supply, including Feed in Tariff programs, Community Solar programs, and larger-scale development of local resources through utility-led build out and/or power purchase agreements (PPAs). CleanPowerSF is working on a Feed in Tariff program, exploring the feasibility of developing a community solar program, and plans to develop additional discrete projects (such as on SFPUC property at Sunol or Tesla), once additional staff resources to develop and administer these programs are available. Due to their cost-effectiveness, CleanPowerSF anticipates most immediately seeking PPAs for new, local and renewable energy resources in its upcoming energy procurements.

#### *Demand-Side Local Development*

CleanPowerSF staff plan to develop demand-side program offerings following completion of citywide enrollment, further stakeholder engagement, and the identification of funding sources. One potential external source of funding (i.e., non generation revenue) for energy efficiency and

demand response programming is public goods charge (PGC) funds collected from all ratepayers and overseen by the California Public Utilities Commission (CPUC). Only one CCA, MCE, has applied for and successfully leveraged energy efficiency PGC funding to date, and it has borne substantial program design restrictions and administrative costs from the CPUC’s evaluation, monitoring, and verification requirements (which were created for IOUs). CleanPowerSF will continue to plan for demand-side programs and explore sources of funding.

**3.2.5 New Renewable Energy Supply Will Drive New Job Creation**

The major driver of job creation for the CleanPowerSF program, at least initially, will be sourcing more renewable energy within California. These new renewable energy jobs will come from the construction and operation of renewable power plants.

Using the National Renewable Energy Laboratory’s Jobs and Economic Development Impact (JEDI) model, staff has estimated that 1,300 to 5,000 jobs may be created over the next 4 to 5 years to support CleanPowerSF’s achievement of 50% renewable energy content in its *Green* product.<sup>14</sup> Findings from this analysis are summarized in Table 2.

**Table 2: Job Creation Estimates from Renewable Energy Project Development**

	Construction Jobs		Plant Operations		Total Jobs	
	Low	High	Low	High	Low	High
<b>Phase 1<sup>15</sup></b>	165	660	6	22	170	682
<b>Full Scale<sup>16</sup></b>	1,320	5,281	45	181	1,365	5,462

This job creation range is dependent on the amount of renewable energy supply being sourced from newly constructed renewable power plants. The projection assumes 20-80% of CleanPowerSF’s renewable energy supply comes from newly constructed renewable plants. The number of jobs ultimately created will depend on the amount of energy is sourced from new versus operating renewable energy plants.

CleanPowerSF can likely create more clean energy jobs through additional programing, but these jobs are difficult to quantify at this time. The CleanPowerSF team will report on job creation estimates as it brings proposals for new service and program initiatives to the Commission for approval.

<sup>14</sup> This projection assumes 20-80% of CleanPowerSF’s renewable energy requirement is sourced from newly constructed renewable plants.

<sup>15</sup> Job estimates for Phase 1 assume that on the low end the program builds new projects to serve 20% of its forecasted renewable energy requirement (19 MW of new renewable capacity) and on the high end 80% of its forecasted renewable energy requirement (76 MW of new renewable capacity).

<sup>16</sup> Job estimates for Full Scale assume that on the low end the program builds new projects to serve 20% of its forecasted renewable energy requirement (140 MW of new renewable capacity) and on the high end 80% of its forecasted renewable energy requirement (560 MW of new renewable capacity).

### Supply Findings Summary

- ✓ **Energy market findings:** Energy prices are stable, and have lowered slightly over the past few years. Data show that the renewable and other energy products that CleanPowerSF may seek for growth are available at reasonable prices, but a solicitation is required to determine the scale and cost of supplies required for citywide service.
- ✓ **Procure aware of compliance deadlines:** Historical and forward price curves for renewable energy indicate that prices increase during the final year of state RPS compliance periods. 2017 is the first year of a new compliance period, making it a good time to buy in the market as prices will likely increase towards the end of the current compliance period (2020).
- ✓ **Prioritizing Bucket 1 renewables:** To date CleanPowerSF has purchased only PCC 1 and no PCC 2 or PCC 3 renewable products. CleanPowerSF continues to prioritize PCC 1 over other renewable energy product types, at a cost of two to three times the cost of PCC 2 and ten to twenty times the cost of PCC 3 products. Given CleanPowerSF's multiple goals, it may be prudent to maintain the option to procure PCC 2 as a means of increasing renewable content to support program growth while also achieving ratepayer affordability. PCC 2 resources could be used as a bridge to maintain desired renewable energy content until new California or Bay Area projects can be constructed to serve CleanPowerSF load.
- ✓ **Local development:** CleanPowerSF local development goals can be supported in the near-term through new long-term local renewable PPAs continuing development of CleanPowerSF's Feed-in-Tariff program. Additional staffing resources will allow CleanPowerSF to explore and pursue additional development paths such as utility-led community renewables.
- ✓ **New jobs will be created:** Meeting the program's renewable energy goals will be the major driver of new job creation. The jobs created from sourcing more renewable energy within California will come from the construction and operation of renewable power plants. Staff has estimated 1,300 to 5,000 jobs may be created over the next 4 to 5 years to support the CleanPowerSF's achievement of the proposed 50% renewable energy goal. The ultimate number of jobs created will depend on the amount of energy is sourced from new versus operating renewable energy plants.
- ✓ **Credit and collateral constraints:** Supply contract collateral and financing requirements can vary by product and supplier. In general, firm and shaped contracts from more conventional suppliers require significantly more collateral than long term renewable PPAs, which may require very little or no collateral. Collateral needs tie to contract volume and length, making a narrow open position more costly from a supply financing perspective.
- ✓ **Risk management requires portfolio management:** Contract diversification and active portfolio management will be critical to program success (and successful growth). Research points to the use of short-term conventional contracts and long-term renewable PPAs – the latter of which may be with unrated developers, making diversification valuable as a risk mitigation strategy. Assigning appropriate expertise and bandwidth for portfolio management will be critical, as will be the development of a strong **Integrated Resource Plan (IRP)** (underway and to be completed summer 2017).
- ✓ **Administrative efficiency in supply contracting is critical to achieve competitive pricing:** The SFPUC must continuously work to improve power contracting practices to allow the Power Enterprise to respond to favorable market opportunities in a timely manner. Continuing to standardize contracting documents, procedures and supporting systems will support this goal.

### 3.3 Financing Needs and Options

CleanPowerSF's growth will rely on the ability to access cost-effective financing for liquidity for basic program operations as well as collateral for power supply purchases. The availability, cost and terms of financing for program expansion are core considerations of the CleanPowerSF growth plan.

Financing for CCA activities is a rapidly evolving market. SFPUC staff, in partnership with financial consultant Clean Energy Capital, have gathered information on the state of CCA operations and supply purchase collateral financing through outreach with financial institutions, power suppliers, and the power purchasing staff at other CCAs.

#### 3.3.1 Credit Availability

The research conducted by CleanPowerSF over the past several months suggest credit is available, potentially with limited or no recourse to the Power Enterprise. However, parties still have different views on CCA credit, based principally on varying views of CCA program risk.

Through this research staff has learned that financing costs and collateral requirements can be influenced by a number of factors, including:

- **Financial stability and track record:** Demonstration that CleanPowerSF's performance is meeting financial projections and plans can provide confidence to suppliers and financial partners. The longer the track-record with this type of performance, the greater the value.
- **Cash on hand:** A number of suppliers have been willing to remove collateral or dedicated reserve requirements if a CCA's financials show liquidity and strong net position.
- **Customer retention:** Low opt-out rates provide financial and power supply entities with a sense of security that revenues are stable and will continue to come in.
- **Financial transparency:** All suppliers and financing entities have mentioned the value of transparency. Specifically, the provision of monthly financial statements (unaudited) by CCAs such as MCE and SCP have supported successful negotiations with lenders and suppliers.
- **Establishment of a lockbox:** having a financial institution and/or supplier(s) party to a lockbox that receives IOU-delivered customer revenues has been stated as desirable by some, but not all, financial and power supply parties.

Based on this research and the program's current financial standing, staff estimates that CleanPowerSF could currently access sufficient credit to support supply transactions of approximately 200 MW. This assumes that the supply portfolio is composed of a mix of shorter term conventional and longer term renewable contracts similar to other operating CCAs. Ultimately, the desirability of the available credit will need to be reviewed through a more formal process, such as a Request for Proposals (RFP).

Because the exact financing needs will depend on the needs and terms of CleanPowerSF's intended supply contracts, CleanPowerSF staff anticipates that financing options would most opportunely be assessed through an RFP process held in parallel with an energy supply Request for Offers (RFO) process. CleanPowerSF and SFPUC Business Services staff are in the process of preparing this upcoming financing RFP.

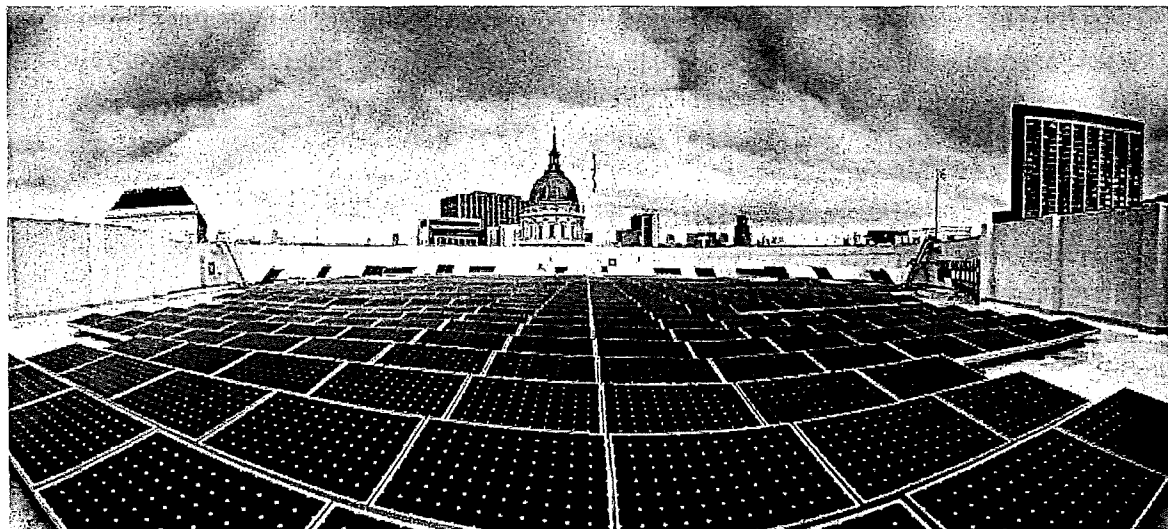


Photo 7: Davies Symphony Hall Solar Panel Installation

### 3.3.2 Considering a Lockbox

As CleanPowerSF considers tools and methods to optimize its collateral and credit terms, staff has reviewed the possibility of setting up a lockbox. A lockbox is a financial arrangement in which a third-party financial institution, or trustee, maintains a set of accounts on behalf of a CCA entity. The CCA entity assigns the trustee its right to receive revenues from power sales, and the utility responsible for billing customers (PG&E) pays the trustee directly. The trustee applies the revenues it receives in accordance with a pre-defined waterfall of priorities. In a single-party lockbox, the first priority is payment of monies due to a single power supplier, typically the full-requirements power supplier selected by the CCA entity. In a multi-party lock-box, multiple power suppliers (and potentially financial institutions) designated by the CCA entity share this first-priority position.

As used in the CCA sector, the lockbox has two primary functions. The first is to establish a priority of payments that grants designated creditors (such as the full-requirements power supplier) a senior position; the second is to empower a third-party financial institution to administer the established priority of payments. Discussions with suppliers and financing entities



revealed that the transparency and the effective one month's reserves provided by the lockbox flow of payments are also attractive to some participants. In general, conventional suppliers and financial institutions were more likely to see value in or strongly recommend using a lockbox. Some conventional suppliers and renewable developers expressed ambivalence to a lockbox with a preference for more traditional forms of security such as cash posting, prepayment, or letters of credit.

Unique among CCAs, CleanPowerSF has not implemented a lockbox and instead collects and disburses funds as an internal administrative function. Research shows that CCA experience with utilization of a lockbox is mixed. Some CCA representatives found the lockbox burdensome and costly to administer (primarily citing legal fees for managing modifications for multi-party use); some also cited challenges of supplier unease and cash flow restrictions. However, most found use of a lockbox valuable for the purpose of lowering collateral and credit requirements, in particular in the early stages of that CCA's establishment and before the existence of a financial track record.

### *3.3.3 Options for Financial Independence and Credit Rating Development*

Per CleanPowerSF's 2015 Business Plan and Business Practice Policies, CleanPowerSF has been established as a financially-independent entity within the SFPUC Power Enterprise, with separate and defined ratepayers. This means the revenues, expenses, assets and liabilities of CleanPowerSF remain separate from the rest of the Power Enterprise and SFPUC. Financial independence allows CleanPowerSF revenues and expenditures to be excluded from the Power Enterprise bondholder pledge, and also sets CleanPowerSF on a path to establishing a clear financial track record (and eventual independent credit rating) to support favorable negotiations with financial institutions and energy suppliers.

However, the Power Enterprise has provided limited financial backing to support CleanPowerSF's launch, in the form of an \$8 million loan and securitization of letters of credit. Given the projections of credit availability discussed above, CleanPowerSF will be seeking to grow its program using third party financing and without using any further recourse to the Power Enterprise, while continuing its debt service payments to the Power Enterprise on the established payment schedule. Ultimately, the feasibility of implementing this strategy will be confirmed by the financing RFP and energy supply RFO processes, which will clarify the cost and amount of credit that will be required.

### *3.3.4 Valuing Reserves*

Fully funding program reserves is a critical strategy for maintaining strong program operations, as well as CleanPowerSF's ability to deliver on its goals of rate affordability, reliability and stability. Per its Business Practice Policies, CleanPowerSF is dedicating a portion of its net revenue to reserves with the goal of growing operating reserves equal to 3 months of operating expenses, and rate stabilization reserves of 15% of total annual revenues, in three years. Rate stabilization reserves will be a particularly critical tool to mitigate external risks factors (e.g., changes in the

PCIA or PG&E generation rate) affecting CleanPowerSF's affordability and competitiveness on a total-bill basis. As noted earlier, reserves will also be particularly important for the rate protection of CARE customers.

In a survey of suppliers, financial institutions and CCAs, CleanPowerSF staff found that reserves are a key piece of supplier/financier review of a CCA's financial suitability, which may help lower financing burdens and/or reduce or waive collateral requirements. A survey of the reserve policies of other CCAs has revealed that other CCAs have set similar reserve targets.<sup>17</sup>

### Financing Findings Summary

- ✓ **Availability and cost of credit:** Financial institutions have expressed interest in providing credit support to CleanPowerSF, at a scale that would support significant growth in program demand (likely up to 200 MW). However, the availability and cost of this credit must be determined through a Request for Proposals process, which would be most productive if conducted in parallel with an energy supply Request for Offers.
- ✓ **Financial best practices:** CleanPowerSF should consider taking actions to make itself a desirable counterparty to energy suppliers and financial institutions – such as offering transparency in monthly financials, building a strong net position and program reserves, and demonstrating how program performance aligns with projections – in order to reduce financing costs and ultimately build a path to financial independence and a CleanPowerSF credit rating.
- ✓ **Lockbox as a potential strategic tool:** The lockbox payment structure is an option for securing power purchases if third party credit support solicited through the proposed financing RFP is insufficient or too costly. While the lockbox is a proven means of securing CCA power supply transactions and may lower the cost of financing, these benefits should be weighed against the administrative costs and other potentially limiting factors, such as reducing the interested power supplier pool. CleanPowerSF should also explore whether or not the benefits of a lockbox can be provided to counterparties through alternate methods, such as an internally-administered priority of payments structure.
- ✓ **Suitability of reserve policy:** CleanPowerSF's current reserve policy is comparable to those of other CCAs. Funding reserves are and should continue to be a critical component of CleanPowerSF's financial strategy.

<sup>17</sup> See MCE's Feb 3<sup>rd</sup> 2016 discussion of a reserve target policy in its Executive Committee Meeting materials: <https://www.mcecleanenergy.org/wp-content/uploads/2016/01/2.3.16-ExCom-Meeting-Packet.pdf>; this policy was voted in on February 18<sup>th</sup>, 2016: <https://www.mcecleanenergy.org/wp-content/uploads/2016/03/2.18.16-Board-Minutes.pdf>. Sonoma Clean Power's reserve policies were adopted in January 2015: <https://sonomacleanpower.org/wp-content/uploads/2015/01/Revised-Board-Policies-amended-2015.05.07.pdf>.

### 3.4 Regulatory and Legislative Affairs

As CleanPowerSF expands, it will continue to confront complex and evolving regulatory and legislative challenges. CleanPowerSF must remain in compliance with state and federal regulations and staff resources are needed to understand key issues, conduct compliance activities, and oversee the process. CleanPowerSF must also diligently monitor regulatory and legislative activity to ensure fair competition and to protect the interests and investment of San Francisco in the CleanPowerSF program. Regulatory and legislative intervention will be critical to ensure CleanPowerSF is able to compete on a level playing field with PG&E and to manage program costs.

#### 3.4.1 Regulatory Compliance

As for all CCAs, the compliance burden for CleanPowerSF is significant. Approximately 50-60 compliance reports must be developed and submitted each year to state and federal agencies, including:

- California Public Utilities Commission
- California Energy Commission
- California Air Resources Board
- California Independent System Operator
- California Board of Equalization
- U.S. Energy Information Agency
- Western Renewable Energy Generation Information System

As compliance is not optional, CleanPowerSF must ensure it has staff bandwidth and knowledge to fulfill these requirements. Regulatory and Legislative Affairs has been identified as a high priority for near-term staff additions. A full list of CleanPowerSF compliance requirements per its current programming is included as Appendix A-2.



Photo 8: CleanPowerSF at Earth Day SF 2017

### 3.4.2 Regulatory and Legislative Advocacy

To protect the interests of San Francisco ratepayers – both CCA and non-CCA participants alike – the Power Enterprise regulatory staff and the City Attorney’s Office must monitor and engage in many proceedings before State regulatory agencies as well as monitor bills at the State Legislature. Appendix A-2 lists the proceedings staff is actively engaged in and/or monitoring now. This list will evolve over time, as CleanPowerSF priorities shift, new proceedings begin, and existing proceedings close. Further, as staff resources increase and decrease, the time and attention staff may dedicate to these proceedings will change.

As CleanPowerSF continues to evaluate its regulatory priorities, it is helpful to have a framework to analyze the potential impact of new and existing issues. Similar to what has been put in place by other CCAs, staff recommends a regulatory and legislative advocacy framework focused on the following three issues:

- **Competitiveness:** Ensuring that CleanPowerSF competes in a fair environment without other providers receiving undue advantage.

- **Cost:** Ensuring the costs and responsibilities imposed on CleanPowerSF ratepayers through regulations and/or legislation are fair and lend to the most efficient means of achieving program goals.
- **Local Responsibility:** Ensuring that local decision-making authority over CleanPowerSF energy procurement – a key driver of the CCA model –remains intact while providing opportunities for CCAs to be proper stewards of their place in the greater electric system.

Issues that involve multiple areas of the framework are more likely to significantly impact the goals and/or operations of the program and are deserving of more staff attention and resources.

Figure 18: CCA Regulatory Involvement Framework

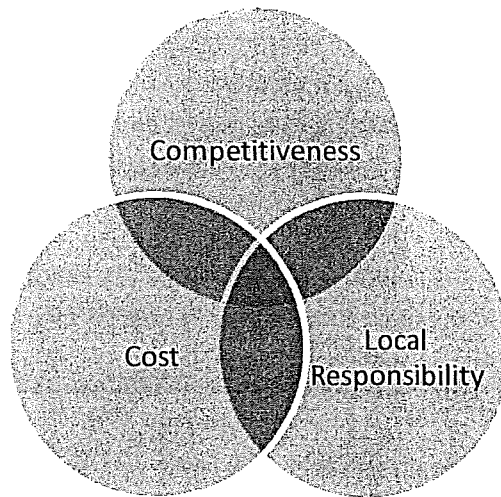


Table 3: Examples of Regulatory Proceeding Priorities

	Key Issues	Example Activities/ Proceedings
<b>Cost</b>	<ul style="list-style-type: none"> <li>• Ensuring CCA procurement requirements don't unduly increase supply costs</li> <li>• Managing cost burdens of additional energy programs (e.g., energy efficiency)</li> </ul>	<ul style="list-style-type: none"> <li>• Integrated Resource Plan (IRP), long term contracting requirements, Resource Adequacy (RA)</li> <li>• Renewable Portfolio Standard (RPS)</li> <li>• SB 350 implementation</li> </ul>
<b>Competitiveness</b>	<ul style="list-style-type: none"> <li>• Ensuring non-bypassable charges (e.g., PCIA, FFS) are fair, equitable and transparent</li> <li>• Ensuring PG&amp;E rates appropriately reflect costs – and that those costs are borne by the appropriate service provided (generation, transmission, distribution)</li> </ul>	<ul style="list-style-type: none"> <li>• PCIA and FFS setting in PG&amp;E ERRRA</li> <li>• General Rate Case</li> <li>• Transmission Access Charge</li> <li>• Investor owned utility applications and advice letters for new power contracts</li> <li>• Cost allocations to PG&amp;E Solar Choice</li> </ul>
<b>Local Responsibility</b>	<ul style="list-style-type: none"> <li>• Ensuring state oversight applied to investor-owned LSEs does not challenge local control. CleanPower provides SF as a CCA</li> </ul>	<ul style="list-style-type: none"> <li>• IRP</li> <li>• Long term contracting requirements</li> <li>• RA</li> </ul>

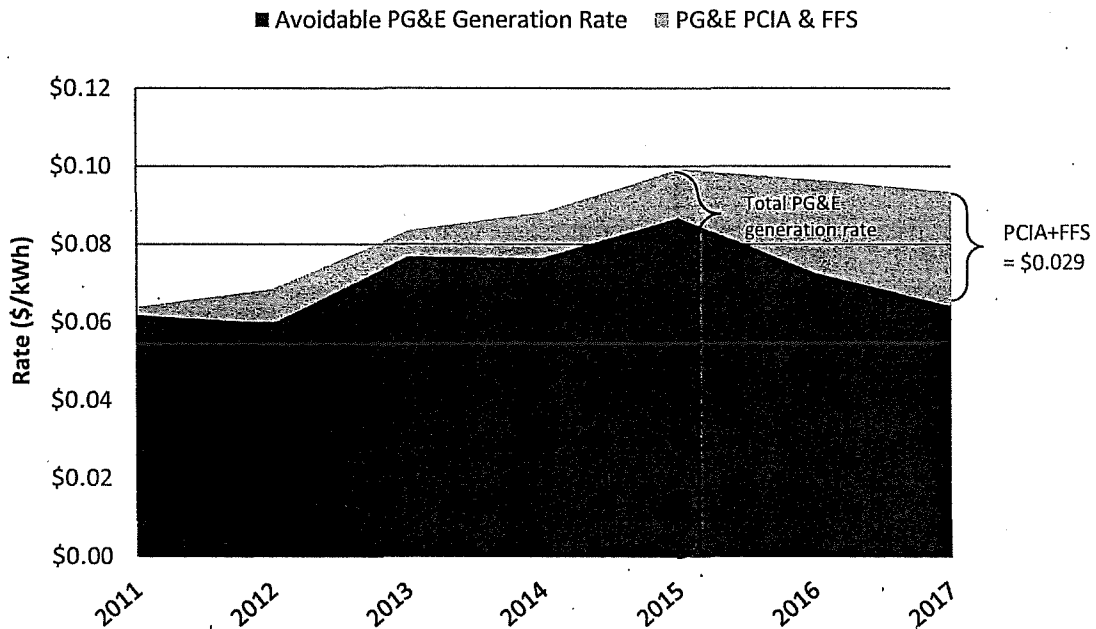
Table 3 above shares key proceedings currently requiring active advocacy and engagement from CleanPowerSF regulatory staff. It is important to note that as CleanPowerSF grows and matures, the addition of new programs may necessitate additional advocacy and compliance engagement. For example, the development of customer-side programming using PGC funding overseen by the CPUC carries significant compliance and advocacy requirements. A list of current advocacy proceedings and items is included in Appendix A-2.

**3.4.3 Keeping Stride with the PG&E Generation Rate and PCIA/Franchise Fee Surcharge (FFS)**

CleanPowerSF is committed to offering affordable service with rates that are competitive with PG&E. To achieve this, CleanPowerSF strives to maintain total generation rates that compete with PG&E's, even after accounting for PG&E's Power Charge Indifference Adjustment (PCIA) and Franchise Fee Surcharge (FFS), also known as non-bypassable charges. PG&E's generation rates vary by customer rate class, may change multiple times in a year, and have varied over the last ten years from a low of just over \$0.06/kWh for the largest commercial accounts in 2012 to a high of over \$0.10/kWh for medium commercial in 2015. Rates climbed steadily from 2012 to 2015, but decreased in 2016 and 2017.

The chart below shows how the addition of the PCIA and FFS charges affect the threshold that CleanPowerSF must meet to maintain competitiveness with PG&E on a total-bill basis.

**Figure 19: PG&E Generation Rate and PCIA Since 2011 (Residential)**



At current levels, PG&E's PCIA and FFS charges force CleanPowerSF to set generation rates approximately 20-30% below PG&E's in order to offer service to customers at a similar cost. The magnitude of the non-bypassable charges' effect on CleanPowerSF rate competitiveness and affordability illustrates the importance of building and maintaining appropriate regulatory advocacy resources to ensure that these charges are determined in a fair and reasonable manner.

#### Regulatory and Legislative Affairs Findings Summary

- ✓ **Compliance is not optional:** With as many as 60 regulatory compliance reports due every year, it is critical that staffing is sufficient to plan, prepare and demonstrate compliance.
- ✓ **Regulatory and legislative advocacy will be critical to the long-term success of CleanPowerSF:** State regulations and new legislation can directly affect CCA operations, authority, and competitiveness. This is best illustrated by the significant impact the PCIA can have on program rate competitiveness. It is critical that Regulatory and Legislative Affairs be adequately resourced to ensure that the City and CleanPowerSF is well-represented in these forums.
- ✓ **Additional regulatory bandwidth needs can be triggered by new programming:** Additional regulatory compliance and advocacy needs may be triggered by the launch of new program offerings, such as PGC energy efficiency funding.

### 3.5 Operational Readiness

Having sufficient staff and technology systems in place to support CleanPowerSF's growth will be essential to continue operating efficiently and to meet program goals. While several core functions of CleanPowerSF are scalable to meet the needs of program growth, the strategic application of additional resources will be important to take advantage of customer acquisition opportunities, manage risk, develop complementary program services, moderate workload and promote staff satisfaction. A total staff increase from 15.5 full time equivalent (FTE) employees to approximately 50-55 FTEs employees over the course of program expansion is recommended to serve greater program operational needs.

#### 3.5.1 Current Staffing

The Power Enterprise's CleanPowerSF team is comprised of 8.5 FTEs that are devoted to program development and administration. This team works closely with SFPUC External Affairs on communications and outreach activities. Across the Power Enterprise and External Affairs Bureau, a total of 15.5 FTE positions are funded and directly support CleanPowerSF.

A number of departments across SFPUC and the City and County of San Francisco also support program operations. Within SFPUC, Business Services, Infrastructure, and Human Resources provide critical support functions. CleanPowerSF also depends on a number of departments across the City and County of San Francisco, most notably the Office of the Controller, Office of the City Attorney, Department of Human Resources, and Department of the Environment. An organizational chart showing the support functions provided by these entities is provided in Appendix A-3.

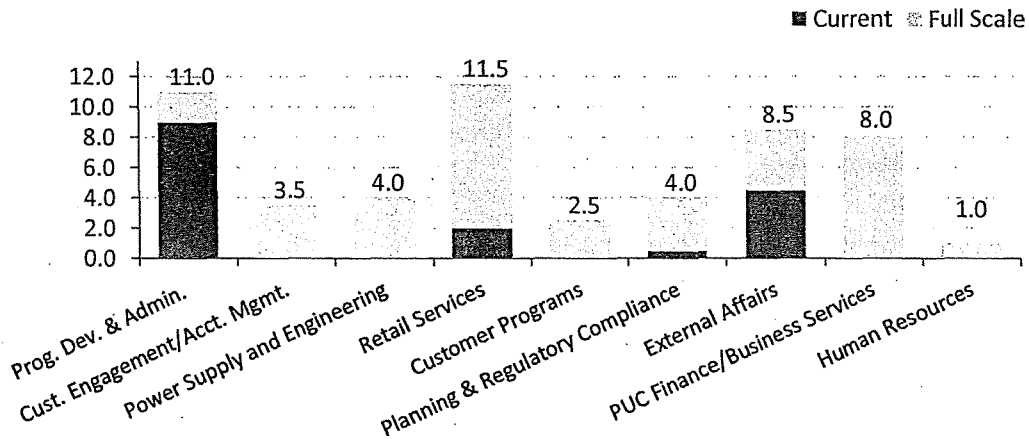
#### 3.5.2 Considerations for Growth

From program inception through launch, CleanPowerSF has operated under an "all hands on deck" approach. Having a small team and ambitious timeline to roll out service to the first phase of customers required staff to wear many hats and collaborate extensively. In recent months, several staff members have been added, which has not only increased CleanPowerSF's capacity but has begun to allow for distinct competency areas to develop. Among these are customer data analysis, back office operations, energy supply procurement, demand forecasting, and customer program development. As the program continues to grow, it will gain efficiency by further developing these operating groups and, where feasible, integrating with other Power Enterprise teams working on similar functions.

The staffing recommendations offered in this Growth Plan are drawn from discussions with key Power Enterprise and SFPUC personnel as well as a comparative analysis of the CleanPowerSF organization with other CCA organizations. The following areas were identified as priorities for additional staffing and systems resources to support program expansion. The program staffing proposal by functional area is summarized in Figure 20.



Figure 20: CleanPowerSF Staff Growth by PUC Group (54 FTEs)



*Origination and Power Contracting (Power Supply and Engineering Group)*

As CleanPowerSF’s energy demand grows, the program will need to significantly increase the number of energy supply contracts and counterparties in its energy supply portfolio to control costs, best take advantage of market opportunities, and manage risk. Over the next 12-24 months, the SPFUC will need to execute a significant number of new power supply contracts. Because energy supply represents the vast majority of program costs, strong management and staffing support in this area is essential to CleanPowerSF’s financial stability and competitiveness.

Staff recommends immediately adding staff to support this critical program growth and operating function. A team should be developed that is devoted to resource planning, solicitations, and contract administration. This capacity can be shared with other Power Enterprise business lines.

*Customer Engagement / Account Management*

The expansion of CleanPowerSF to other districts in San Francisco will bring about shifts in the customer base, necessitating strategic changes in customer engagement. Enrolling medium and large commercial accounts will require a more direct and intensive engagement approach to retain customers and promote *SuperGreen* adoption. Expanding to certain residential neighborhoods across the City will require grassroots, community-based engagement in Chinese and Spanish to ensure customers are well-informed, build trust, and foster customer retention.

Staff recommends building a team of account managers dedicated to relationship development, customer service, billing analysis, and sales, with two staff added prior to the next major enrollment period (May 2018). After Citywide enrollment has been achieved, the focus of the team should shift to furthering *SuperGreen* adoption, forging marketing partnerships, and marketing new customer services.

*Demand Forecasting, Scheduling and Settlements, and Risk Management and Business Analysis (Wholesale and Retail Services Group)*

While these teams currently support CleanPowerSF, new systems and additional staff resources are needed to provide better coverage and staffing depth to support scaling to City-wide

enrollment. These critical program operating functions must be able to maintain operations when staff is absent due to vacation, leave, or turnover/attrition.

Staff recommends adding staff immediately to support the increasing workload in the load forecasting, power scheduling and settlements and risk management functions. CleanPowerSF should pursue developing shared staffing and system resources with other Power Enterprise business lines to capture economies of scale. Staff may be added incrementally as the program grows to increase coverage.

*Energy Data Systems (Whole and Retail Services Group)*

Better leveraging customer and program data is essential for future planning, research, and demand forecasting efforts. In the longer term, the strategic benefits of transitioning away from contractors and building customer service and/or billing administration capabilities internally will necessitate large-scale systems implementation efforts.

Staff recommends the following:

- Add professional services consulting capacity to support near and long-term data management and data systems planning and development.
- Expand data systems capabilities (e.g., in MDMS) to receive interval level meter data and other related customer data, making this information more accessible for analysis.
- Add staffing resources to the Power Enterprise Energy Data Systems team and the SFPUC's Information Technology group to support the expanded and on-going information systems and technology requirements of CleanPowerSF and the Power Enterprise.

*Regulatory and Legislative Affairs (Planning and Regulatory Compliance Group/SFPUC External Affairs)*

As discussed in Section 3.4, it is critical for CleanPowerSF to track and participate in many state-level proceedings and rate cases to ensure the program stays in compliance with its regulatory obligations and is able to compete on a level playing-field. In addition, CleanPowerSF must stay actively engaged in state legislative proposals that may affect how CCA programs operate. Going forward it will be important that SFPUC External Affairs is sufficiently equipped to support the significant legislative needs of the CleanPowerSF program.

CleanPowerSF urgently needs Regulatory and Legislative Affairs staff capacity within the Power Enterprise and the SFPUC External Affairs group to bolster efforts in this important area. CleanPowerSF should also continue to collaborate with other CCAs through the CalCCA forum to leverage the collective regulatory and legislative resources of all CCAs.

*Customer Service and Billing Administration (SFPUC Finance and Business Services)*

The support of an experienced contractor, Calpine Energy Solutions, in providing Customer Service and Billing Administration services has been critical to CleanPowerSF's success in rapidly launching the program and meeting the significant customer service requirements of enrollment periods. However, an evaluation of the long-term value of using a contractor versus building internal capacity for these services is warranted.

When it comes to customer service, it is important that the City be the face of the program. Call center and customer care expertise exists within the SFPUC today, and internal capacity to serve CleanPowerSF may be added incrementally, over time.

However, billing administration for CleanPowerSF requires complex processes and parallel skill sets do not currently exist within SFPUC (because CleanPowerSF's systems must interface with PG&E's systems). If brought in-house, this technical and highly specialized capacity would need to be developed.

In the near term, staff recommends incrementally building internal capacity for Customer Service, by adding 1-2 staff to answer customer calls and emails, using Calpine's CRM and phone system. Consultants will be needed to evaluate the data systems needs for fully incorporating customer service and billing administration, and to develop a business case for proceeding with integration of one or both services. Second, staff recommends issuing an RFP for systems implementation and ongoing support, and then transitioning CleanPowerSF customer service staff to SFPUC's Customer Contact Center as a full team is hired and SFPUC-managed CRM and phone systems are implemented.



Photo 9: Shiloh I Wind Farm

Table 4 below identifies the distribution of proposed positions, assuming the program grows in two additional phases – a second phase that brings the program to 250 MW of average demand and then at full scale. The projected staffing levels identified in each phase represent the total staff funded by the program at each proposed phase (Phase 1, Phase 2, Full Scale).

Table 4: CleanPowerSF Staffing Plan (FTEs by Program Phase/Size)

SFPUC/Power Enterprise Division	Phase 1 ≈60MW	Phase 2 ≈250MW	Full-Scale 400+MW
Program Development and Administration	9.00	9.00	11.00
Customer Engagement/Account Management	0.00	1.00	3.50
Power Supply and Engineering	0.00	2.50	4.50
Origination and Power Contracting	0.00	2.50	3.50
Retail Services	2.00	6.00	11.50
Forecasting	0.00	1.00	2.00
Scheduling and Settlements	1.00	2.00	3.50
Risk Management and Business Analysis	0.00	1.00	2.50
Energy Data Systems	1.00	2.50	3.50
Customer Programs	0.00	1.00	2.50
Planning and Regulatory Compliance	0.50	2.50	4.00
Regulatory and Legislative Affairs	0.00	2.50	4.50
External Affairs	4.50	6.00	8.50
Outreach and Communications	4.50	6.00	7.50
SFPUC Government Affairs	0.00	1.00	1.00
SFPUC Finance/Business Services	0.00	2.00	8.00
Customer Care / Call Center	0.00	1.00	6.00
Finance	0.00	1.00	2.00
SFPUC Human Resources	0.00	1.00	1.00
<b>Total</b>	<b>16.00</b>	<b>32.00</b>	<b>54.00</b>

**Operational Readiness Findings Summary**

- ✓ **At full-scale CleanPowerSF will need the support of approximately 50-55 full-time staff:** It is projected that CleanPowerSF will require the support of approximately 50-55 full-time staff. This staffing projection is consistent with other CCAs, particularly MCE, which has about 40-45 FTEs and is currently a bit smaller than CleanPowerSF's expected size at full scale. Six of the additional positions recommended in this plan for CleanPowerSF are call center staff, which MCE does not presently perform in-house.
- ✓ **Near-term staffing support is needed in critical program functions:** In the near term, growing CleanPowerSF is going to require the addition of significant new power supplies and financial support. Additional staff are needed immediately to support RFP processes, contract execution, and risk management. Furthermore, increasing regulatory and legislative activity at the State level highlights the need for increased resources to ensure the City's interests are well-represented. Finally, additional support from SFPUC Business Services and Finance, External Affairs and Human Resources will be needed in the very near-term to support the growth process.
- ✓ **Professional services contractors will be needed to fill gaps during growth:** Recognizing that it will take time to staff up the program, professional services will continue to play an important role in filling staffing gaps in program planning and operations. After program growth is complete, CleanPowerSF staff should turn its attention on in-housing operating functions that can be supported by City staff and systems.



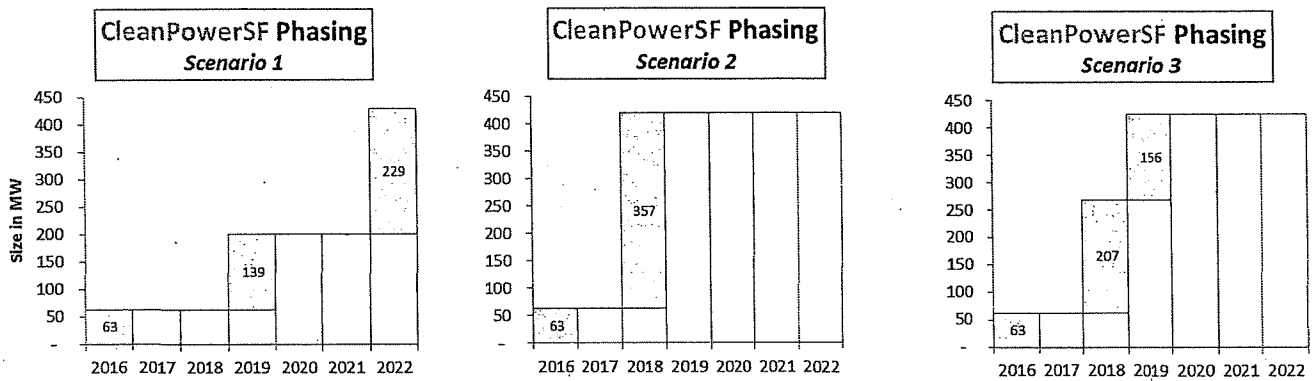
**3.6 Proforma Financial Analysis**

**3.6.1 Scenarios**

Drawing from the customer demand, power supply, financing, regulatory, and operational readiness findings described above, CleanPowerSF staff conducted financial and risk analyses of several scenarios that serve as options for CleanPowerSF program growth:

- Scenario 1: Growth to Citywide Service by 2022, Per 2015 Business Plan Phasing Strategy
- Scenario 2: Growth to Citywide Service by 2018 in One Additional Phase
- Scenario 3: Growth to Citywide Service by 2019 in Two Additional Phases

**Figure 21: Program Phasing Scenarios**



The purpose of this analysis is to understand the financial requirements and performance of different rates of program growth. The analysis identifies the program reserves and estimated collateral requirements for acquiring the power supply needed to meet the program demand in each growth scenario. It is important to note that this analysis does not address whether the energy supplies are available in the market to meet the respective enrollment timelines. As discussed in the Power Supply and Markets Section, the availability of energy supply will need to be established through a power supply RFO.

*Pro Forma Assumptions*

For these analyses, CleanPowerSF has updated its proforma with a number of assumptions covering product content minimums, financing needs, rate projections, market price projections, supply portfolio makeup, staffing needs, and more. These assumptions reflect information conveyed in the detailed findings above. More information on the assumptions used in this analysis is provided in Appendix A-6.

*Scenario 1: Growth to Citywide Service by 2022 Per 2015 Business Plan Phasing Strategy*

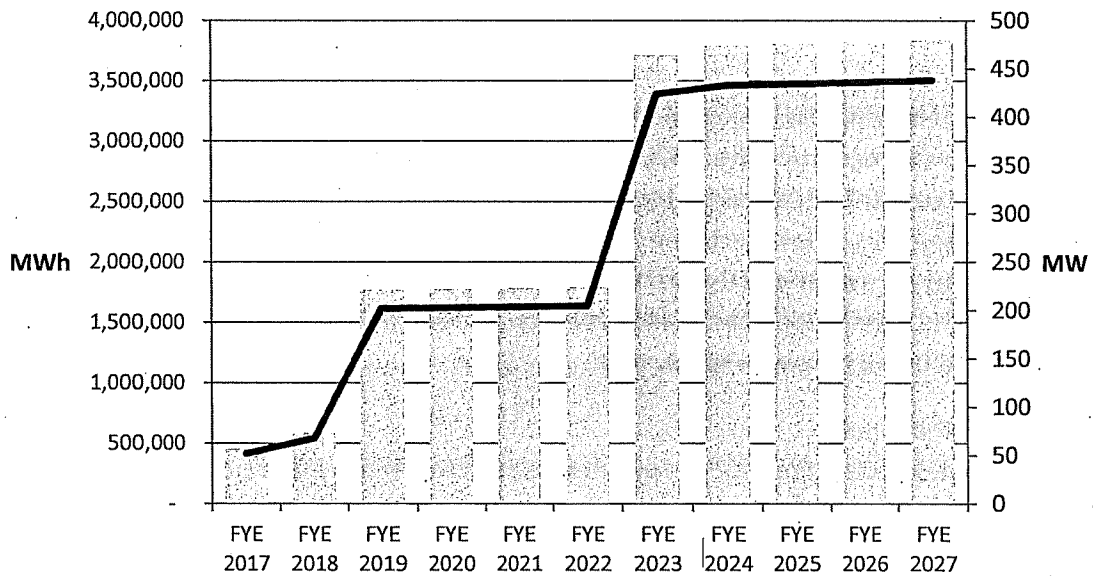
In the CleanPowerSF Business Plan shared with the Commission in December 2015, a plan to phase service to the full City was laid out using three additional auto-enrollment phases to be completed by 2022. The timing of these auto-enrollment phases was determined through

analysis that required CleanPowerSF to complete the self-funding of its reserves and any projected power purchasing collateral requirements in excess of the \$40 million credit support secured by the Power Enterprise prior to enrolling additional customers. The key constraint of this scenario is that it assumes that no external credit support is provided to grow the program and that no additional financial support is provided by the Power Enterprise beyond \$40 million credit support and the \$8 million working capital loan.

This proposed schedule and structure for growing the program has been refreshed as part of the growth planning process, using updated information on market prices, power supply financing needs, competitor rate trends and new data on customer usage gained through CleanPowerSF operations to date. However, the key financial constraints for this scenario remain the same – no additional financial support is provided by the Power Enterprise beyond \$40 million in credit support and the initial \$8 million working capital loan.

Figure 22 below illustrates the projected Scenario 1 load growth. As you can see from the chart, under Scenario 1, the program would grow in two additional phases, a 150 MW phase in June 2018 and another phase of 246 MW in July 2022, which is when the program would begin providing service citywide.

**Figure 22: Annual Energy Sales and Average Demand (Scenario 1 – 2015 Business Plan Phasing Strategy)**



Under this growth scenario, program revenues are projected to grow from approximately \$33.7 million in FYE 2017 to approximately \$128.8 million by FYE 2020. The first year of citywide program sales in Scenario 1 occurs in FYE 2023. This analysis projects that the Operating Reserve target of 90 days of program expenses and the Rate Stabilization Reserve of 15% of annual revenue can be fully funded by program revenues during FYE 2025, about three years after the

program achieves full scale. Scenario 1 assumes \$40 million in credit support from the Power Enterprise is used for power supply transactions. This exceeds the approximately \$17 million that was used to support program launch, and does not leverage third party credit support that staff believes may be available to support expansion (as indicated in the Financing Needs and Options Section above).

**Figure 23: Annual Energy Sales and Average Demand  
(Scenario 1 – 2015 Business Plan Phasing Strategy)**

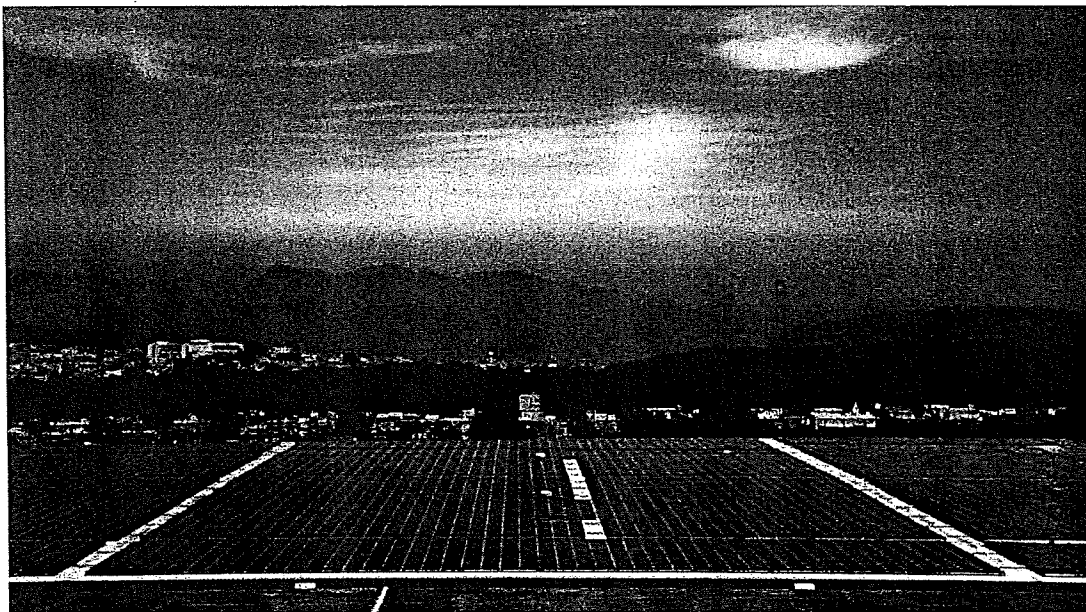
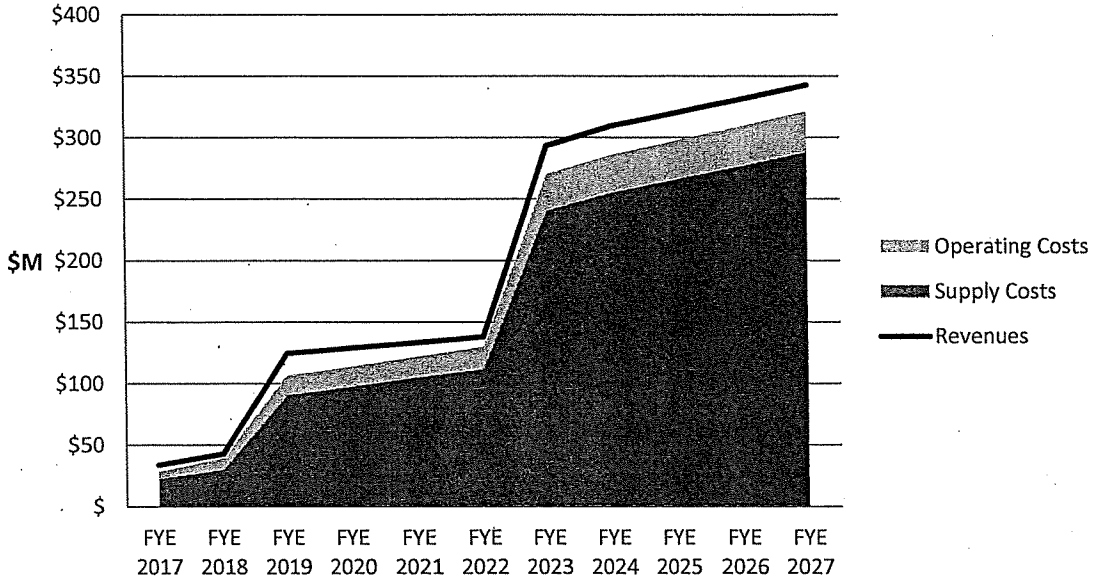
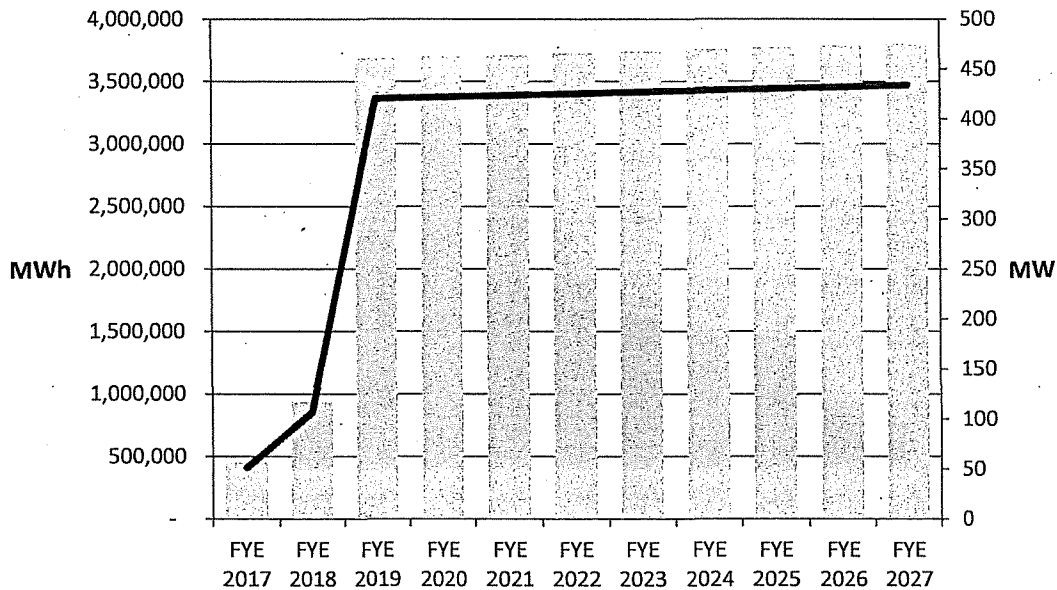


Photo 10: Sunset Reservoir Solar Panels (a CleanPowerSF source of power supply)

*Scenario 2: Growth to Citywide Service by 2018 in One Additional Phase*

Scenario 2 examines an expedited auto-enrollment schedule phasing in all remaining eligible citywide load in one additional phase in May 2018. The Scenario 2 load growth scenario is summarized in Figure 24 below. FYE 2018 shows an increase in sales volume associated with the May and June months. The full extent of the sales growth in Scenario 2 begins to be reflected in FYE 2019. Sales growth beyond 2019 reflects an assumed 0.5% per year natural load growth.

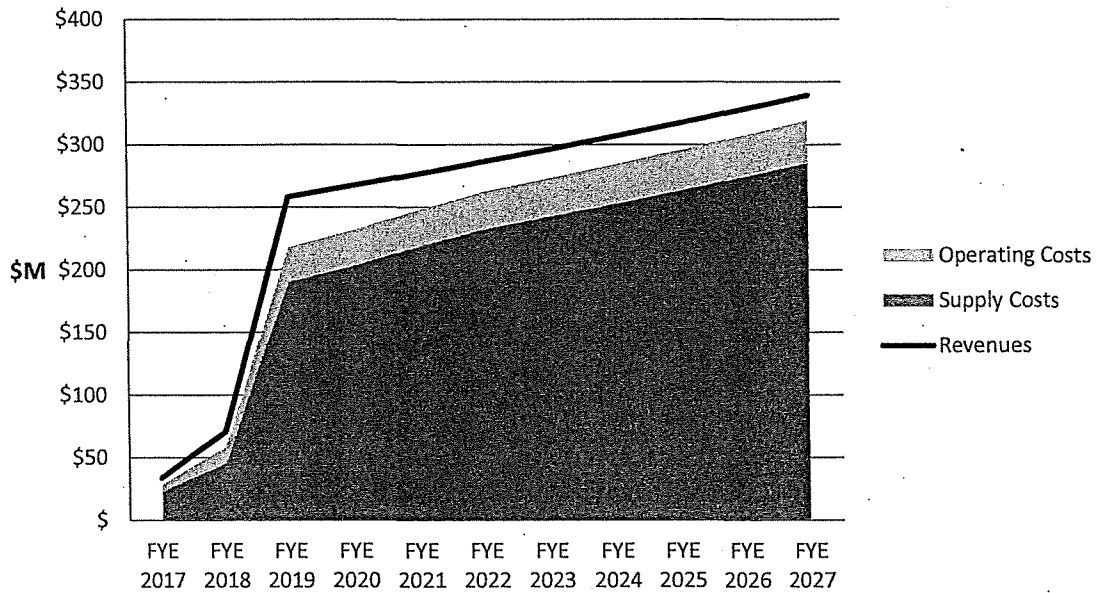
**Figure 24: Annual Energy Sales and Average Demand  
(Scenario 2 – Single Phase Expansion)**



Projected program costs and revenues associated with Scenario 2 are summarized in Figure 25 below (See Appendix A-8 for projected annual sources and uses information). The analysis indicates that the program is projected to recover costs and collect reserves for operating and rate stabilization. Under Scenario 2, program revenues will grow from approximately \$33.7 million in FYE 2017 to approximately \$258 million by FYE 2019, the first year of citywide program sales. The Operating Reserve target of 90 days of program expenses and the Rate Stabilization Reserve of 15% of annual revenue can be fully funded by program revenues during FYE 2021, two years after the program achieves full scale. This means the program will require external financial support to cover these needs until this time.



**Figure 25: Program Costs and Revenues  
(Scenario 2 – Single Phase Expansion)**

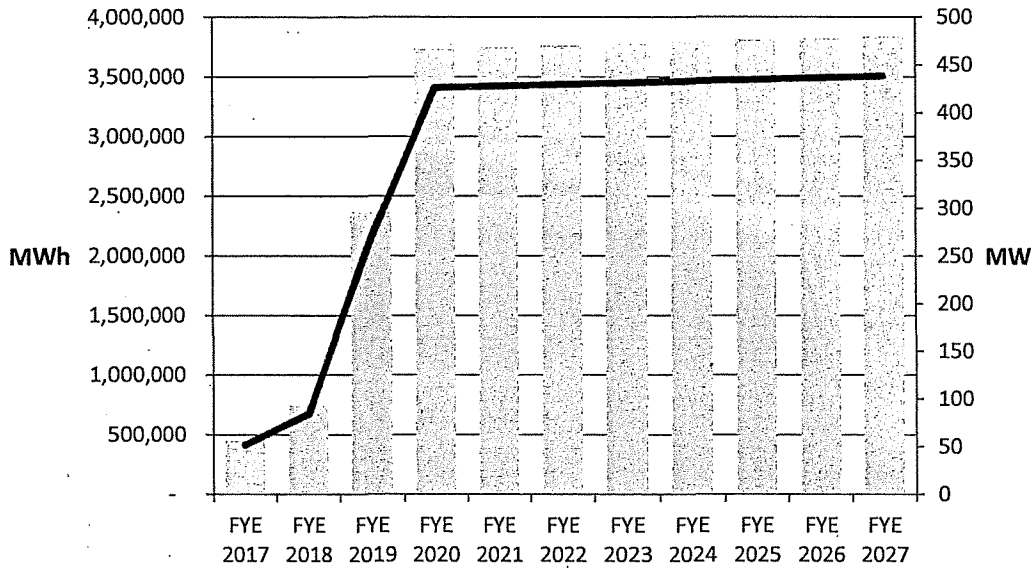


*Scenario 3: Growth to Citywide Service by 2019 in Two Additional Phases*

Scenario 3 examines a program expansion schedule, in which all remaining eligible citywide load is enrolled in two additional phases, one in May 2018 and one in May 2019.

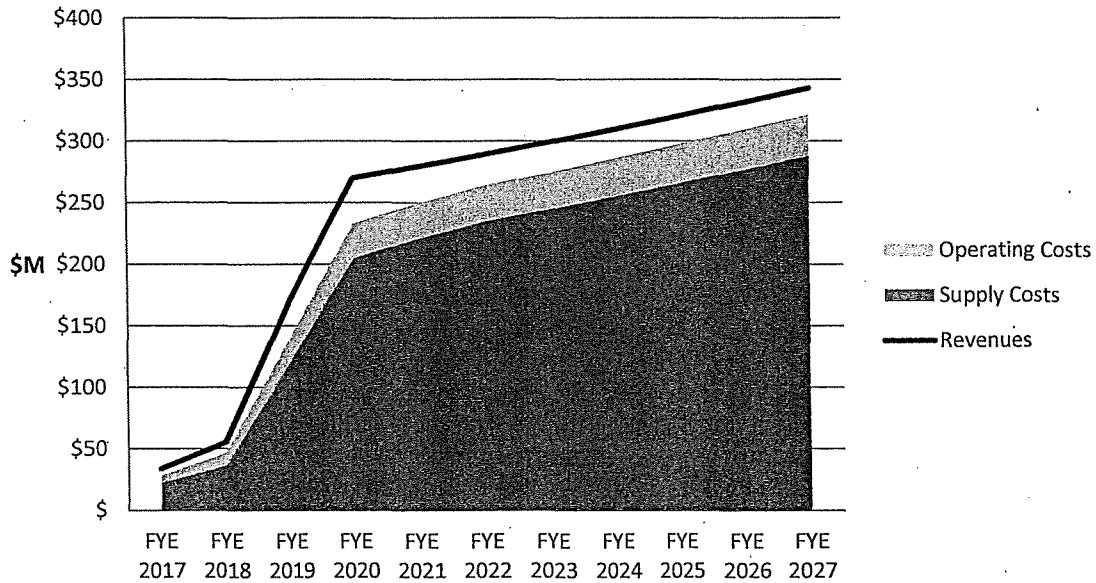
The Scenario 3 load growth scenario is summarized in Figure 26 below. FYE 2018 shows an increase in sales volume associated with the Phase 2 completion in May. The increased sales represent two months of additional demand that occurs at the end of FYE 2018. The growth in sales in FYE 2019 reflect a full year of Phase 2 sales and the Phase 3 enrollment in May. The full extent of the sales growth in Scenario 3 shows up in FYE 2020. Sales growth beyond 2020 reflects an assumed 0.5% per year natural load growth.

Figure 26: Annual Energy Sales and Average Demand (Scenario 3 – Two Phase Expansion).



Projected program costs and revenues associated with Scenario 3 are summarized in Figure 27 below (see Appendix A-9 for projected annual sources and uses information). The analysis indicates that the program is projected to recover costs and collect reserves for operating and rate stabilization. Under this growth scenario, program revenues will grow from approximately \$33.7 million in FYE 2017, to \$171.7 million by FYE 2019, and \$270.1 million at the end of FYE 2020, the first full year of citywide program sales. Like Scenario 2, the Operating Reserve target of 90 days of program expenses and the Rate Stabilization Reserve of 15% of annual revenue can be fully funded by program revenues during FYE 2021, one year after the program achieves full scale. This means the program will require external financial support to cover these needs until this time.

**Figure 27: Program Costs and Revenues  
(Scenario 3 – Two Phase Expansion)**



*Scenario Considerations*

Table 5 below compares key factors staff have identified regarding execution of the enrollment pace for Scenarios 2 and 3.

**Table 5: Comparison of Scenario 2 and Scenario 3 Enrollment Pace Factors**

Factor	Scenario 2 (1 Add'l Phase)	Scenario 3 (2 Add'l Phases)
<b>Operational Readiness</b>	Findings on operational readiness suggest that current staffing levels will not be sufficient support expansion to the full City load in May 2018. At a minimum, additional staffing is required to support priority operational functions such as supply portfolio management, load forecasting and scheduling, account management and communications.	A two-phase approach to growth spread out over a 6 to 12 month time period is preferable from an operational readiness perspective as it will allow for additional time to staff up. This will also allow the SFPUC to better align new operating costs with program revenues (i.e., spreading those costs out over a longer period of time) and reduce the immediate administrative burden of hiring, training, and building institutional knowledge about the program.
<b>Energy Procurement</b>	Diversity of energy supply will be a central piece of energy supply risk management – which, as the greatest program cost is central to rate affordability and program	Spreading the development of a 400 MW+ energy supply portfolio over two phases (compared to one) will provide the CleanPowerSF team

Factor	Scenario 2 (1 Add'l Phase)	Scenario 3 (2 Add'l Phases)
<b>Financial</b>	<p>success. Acquiring sufficient cost-effective renewable energy to meet the program's needs at one time may prove challenging. Ultimately, the results of the power supply RFO will help establish if sufficient cost-effective supplies are available on this timeline.</p> <p>Similarly to Energy Procurement, the SFPUC needs to determine if sufficient financial support is available from third parties to acquire the energy needed to grow the program at this rate. A financing RFP, in conjunction with the power supply RFO, will provide answers to these open questions.</p>	<p>greater flexibility to optimize the portfolio for cost and other attributes important to success. It may also support risk management by providing more time to execute a great number of supply contracts and diversifying the portfolio than can be accomplished under the shorter Scenario 2 timeline.</p> <p>Dividing citywide enrollment into multiple phases rather than just one may allow the SFPUC to finance citywide expansion without any additional financial support from the Power Enterprise.</p>
<b>Communications</b>	<p>While some efficiencies in rollout would be gained from a single additional phase to Citywide service; particularly mass media, staff are concerned about the ability to conduct comprehensive outreach across the city on this timeline, particularly given current staffing levels.</p>	<p>Breaking citywide enrollment out into multiple phases will grant the SFPUC the time needed to conduct comprehensive outreach throughout the city. Depending on the availability of financing and power supplies it may be possible to split the rest of the city into two enrollment periods during the 2018 calendar year, which would give staff more time to conduct a thorough outreach and education campaign. Staff will revisit this option after it has received bids for power supply and program financial support.</p>

It should also be noted that program operating costs (excluding supply costs) are shown to be between 15-20% of total revenues in Phase 1 and decrease to approximately 10-11% of revenues once the program is full scale. This indicates that there may be scale benefits to growth from an operating perspective.

**3.6.2 Risk Analysis**

In order to identify potential financial risks with expedited growth, a sensitivity study was conducted on Scenarios 2 and 3. It focused on the following four variables that staff has identified as having the greatest potential impact:

- **Changes to PG&E's Power Charge Indifference Adjustment:** Staff evaluated the impact of variation in PG&E's PCIA rate on program revenues. An increase of 30% and decrease of 15% from the predicted base case PCIA rates were tested, while assuming that in each



scenario CleanPowerSF would adjust its rates to maintain cost parity with bundled customers.

- **Changes to PG&E’s Generation Rates:** Staff evaluated the impact of variation in PG&E's generation rates on program revenues. An increase of 5% and a decrease of 5% in PG&E's rates from those predicted in the pro forma were tested, assuming that CleanPowerSF adjusts its rates to maintain cost parity with bundled customers and that program costs do not change.
- **Renewable Energy Prices:** Sensitivity analysis was conducted to ascertain the financial impact of renewable energy prices increasing or decreasing by 25%.
- **Renewable Content:** The sensitivity to the renewable content in CleanPowerSF’s portfolio was also explored by increasing the base renewable content by 5% or decreasing it by 2%.

Table 6 below shows the results of the sensitivity analyses in terms of the annual net impact in FYE 2020 dollars and as a percent of revenue. FYE 2020 was selected because CleanPowerSF would have its first full year of sales in both scenarios, thus providing the impact of each risk factor on the program at full scale.

**Table 6: Sensitivity Analysis**

Sensitivity Factor	Change from Base Case	FYE20 Net Impact	% of Revenue
PCIA Change	PCIA decrease by 10%	+\$8.6M	+ 3.2%
	PCIA increase by 30%	-\$25.9M	- 9.7%
PG&E Rate Change (No Change in Cost)	Rate increase by 5%	+\$17.8M	+ 6.6%
	Rate decrease by 5%	-\$17.8M	- 6.6%
Renewable Prices	REC cost decrease by 25%	+\$7.0M	+ 2.6%
	REC cost increase by 25%	-\$7.0M	- 2.6%
Renewable Content	Base product renewable content decrease by 2%	+\$0.9M	+ 0.3%
	Base product renewable content increase by 5%	-\$2.2M	- 0.8%

As shown above, the impact of changes to renewable energy pricing (with no changes to content) and the impact of changes to renewable energy content (with no increase or decrease to pricing) was relatively minimal. Changes in renewable energy pricing, tested at 25% above or below current pro forma assumptions, produce a \$7.0 million (2.6%) change in revenue. Sensitivity to changes in renewable energy content is a bit more significant, increasing revenues by \$900,000 if renewable content was decreased by 2% and decreasing revenues by \$2.2 million if renewable content was increased by 5%. Another way of looking at these sensitivities is that every 1% change in renewable pricing produces a \$280,000 change in net annual revenue. For every 1% change in

renewable energy content the program incurs about a \$450,000 (0.15%) change in net annual revenue.

Changes in PG&E's PCIA and generation rates have the biggest effect on program revenues. As noted above, these sensitivities assume that CleanPowerSF will change its rates in response to a PG&E PCIA or generation rate change. Here, a 5% change in PG&E's generation rates could result in an impact of \$17.8 million (6.6% change in revenue); or, every 1% change in PG&E generation rates results in a \$3.6 million (or 1.3%) change in revenue. In addition, a 10% decrease in the PCIA could result in a \$8.6 million increase in revenue (about 3%) and a 30% increase in the PCIA would decrease program revenues by approximately \$25.9 million (9.7%). For every 1% change in the PCIA, one can expect an approximately \$860,000 (or 0.4%) change in revenue when the program is full scale.

It must be noted that these sensitivities assume that PG&E's rates are changing independent of CleanPowerSF's power costs. Since CleanPowerSF and PG&E will be participating in the same wholesale markets, this is not likely to occur. On the other hand, if CleanPowerSF is highly hedged (i.e., most of its generation costs are fully locked-in on a multi-year basis) and PG&E is refunding a large over-collection (or making up for a large under-collection) from the prior year, a 10% impact is not impossible, especially given the accompanying effect of the PCIA.

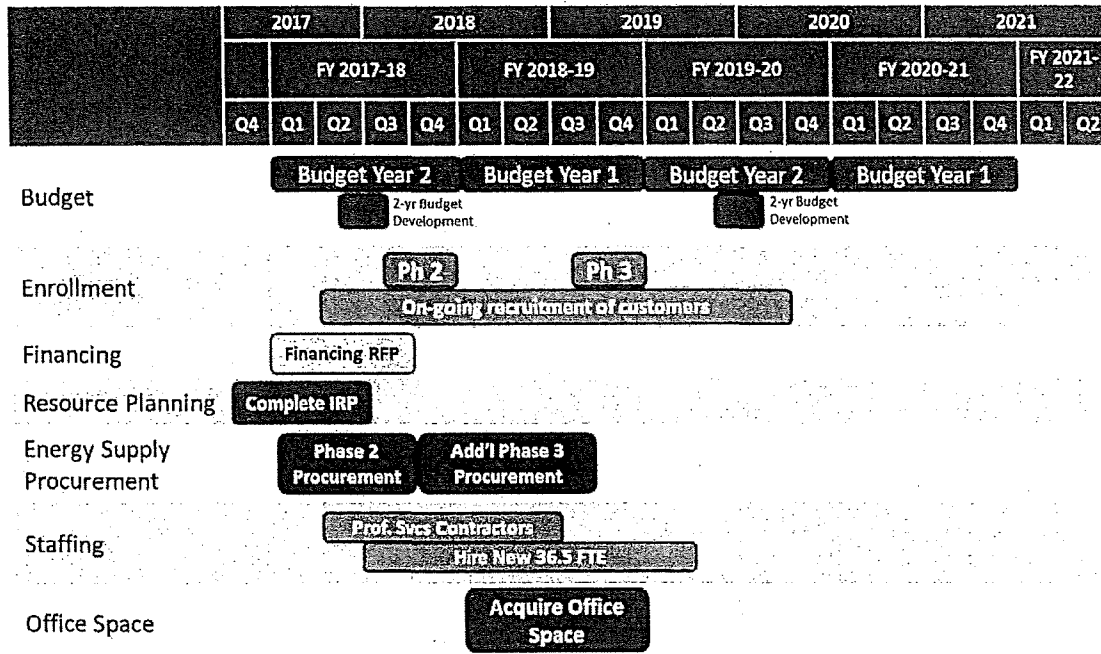
**Proforma Financial Analysis Summary**

- ✓ **The program is financially feasible at different rates of growth:** Each of the scenarios analyzed show that the program is feasible at the different rates of growth considered, given the assumptions used. Given this finding, other factors – such as staffing requirements and supply and financing procurements – play a central role in determining the optimal Scenario for growth.
- ✓ **A key constraint to growth is access to working capital and credit for power purchases:** The analysis projects that the program is expected to need \$40-60 million in credit support and/or collateral to secure power purchase agreements at full-scale. In addition, fully funding financial reserves will require about \$80+ million. Scenarios 2 and 3 indicate that reserves can be fully funded by revenues within 2 years of program expansion citywide, however third party credit support will likely be needed for growth prior to this time.
- ✓ **Changes to PG&E generation rates and the PCIA pose the greatest risk to program financial stability:** The sensitivity analysis indicates that changes in PG&E generation rates and the PCIA have the greatest impact on program revenues and can quickly erode program margins.
- ✓ **Scale efficiencies may be achieved with growth:** Program operating costs (excluding supply costs) are shown to be between 15-20% of total revenues in Phase 1 and decrease to approximately 10-11% of revenues once the program is full scale. This indicates that there may be scale benefits to growth from an operating perspective.

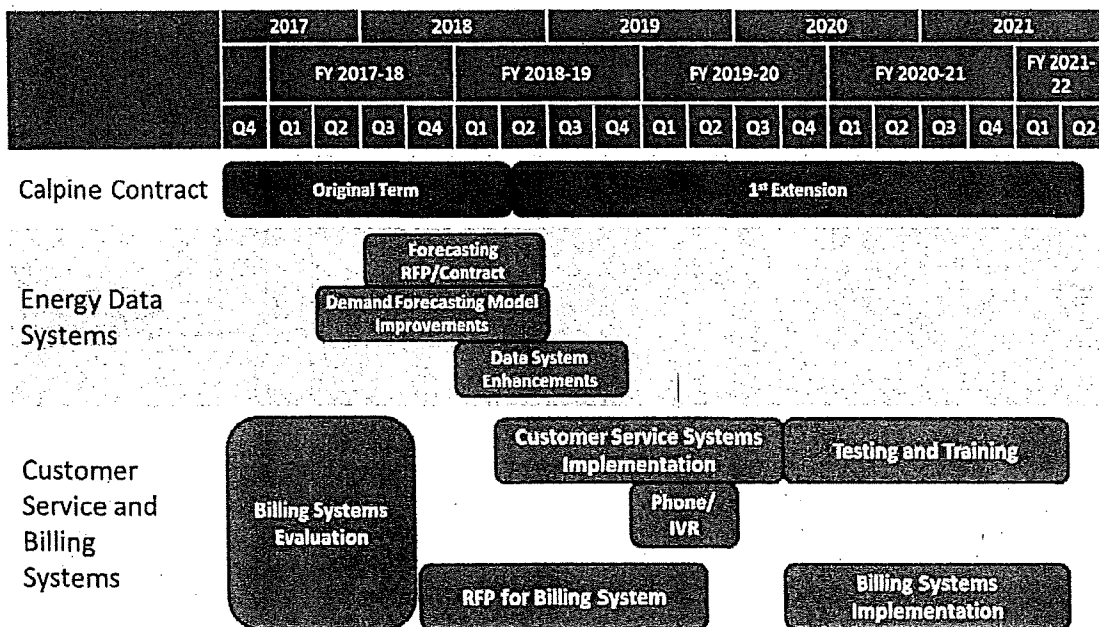


## 4.0 Timeline

### 4.1 Implementation Timeline



### 4.2 Systems Development Timeline



## Appendices



**Appendix A-1: CleanPowerSF Business Practice Policies**

**CleanPowerSF**

**Business Practice Policies**

**Adopted on December 8, 2015**

**(Amended on May 9, 2017)**

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### **Product Content Policy**

*Renewable Content*

All entities that provide electric power to end-use consumers in the state are required to comply with the California Renewable Portfolio Standard (RPS). The RPS establishes the minimum amount of renewable generation a load serving entity must utilize to serve its retail customers, the renewable technologies eligible for compliance to meet that minimum, and the relative amounts of the bundled and unbundled renewable products that may be used. The RPS was established in 2002 under Senate Bill 1078, accelerated in 2006 under Senate Bill 107 and expanded in 2011 under Senate Bill 2 and in 2015 under Senate Bill 350 (Public Utilities Code § 399.11-32). The RPS mandates that 33% of electricity sold to consumers must be generated by eligible renewable resources by 2020 and 50% by 2030.

By a vote of the people, San Francisco established City policy "... that the use of unbundled renewable energy credits for CleanPowerSF customers shall be limited to the extent deemed feasible by the SFPUC.... For renewable energy provided by CleanPowerSF that exceeds the minimum requirements of state law, the voters urge the SFPUC to apply the same limitations on the use of unbundled renewable energy credits, to the extent feasible." (San Francisco Environment Code § 2102(b), Proposition H, 2015.)

In directing the SFPUC to begin development of San Francisco's Community Choice Aggregation program, the Board of Supervisors found that through such a program "...the City could have additional means of increasing the scale and cost-effectiveness of conservation, energy efficiency and renewable energy ...(and) a means of exercising local control over electricity prices, resources and quality of service, and designing local energy systems to protect against future blackouts and rate shocks." (Ord. 86-04)

The SFPUC has developed the CleanPowerSF program to balance the sometimes competing objectives laid out by the Board of Supervisors – affordable, cleaner energy, including local generation and efficiency, while providing for long-term rate and financial stability. To achieve that balance, it is the policy of the SFPUC that the CleanPowerSF program shall offer two retail electricity products at launch: 1) a default "Green" product, with an initial target of 33% to 50% renewable energy content; and 2) a voluntary "SuperGreen" product, with 100% renewable energy content.

The renewable energy content goal of the Green product will be 35% renewable energy content when the program launches in 2016, **increasing to 50% renewable energy content by the end of 2020**. The Green product will at all times be no less than 33% renewable or the minimum statewide RPS target in effect at the time, whichever is greater.

CleanPowerSF will exceed the Green product renewable content commitments when it is cost-effective as market conditions allow while balancing affordability, financial and rate stability, and local project objectives.

It is the policy of the SFPUC that CleanPowerSF purchase renewable energy from projects located within the nine Bay Area Counties (San Francisco, San Mateo, Santa Clara, Alameda, Contra Costa, Solano, Napa, Sonoma and Marin), to the extent cost-effective and as market conditions allow.

The SFPUC shall implement the policy of the City that the use of unbundled renewable energy credits for CleanPowerSF be limited to the extent feasible, consistent with the goals of the program. For purposes of satisfying its renewable energy content objectives, at program launch CleanPowerSF will rely on Product Content Category 1 renewable resources, to the extent economically and financially feasible.

CleanPowerSF will follow the limitations of local and state law regarding the use of unbundled renewable energy credits to satisfy the applicable renewable portfolio standard. For renewable energy provided by CleanPowerSF that exceeds the minimum requirements of state law, the SFPUC will apply the same limitations on the use of unbundled renewable energy credits, to the extent feasible.

#### *Carbon Content*

In 2002, the Board of Supervisors passed the "Greenhouse Gas Emissions Reduction" Resolution (158-02), updated in 2008 (Ordinance 81-08, San Francisco Environment Code § 902), committing San Francisco to reduce citywide GHG emissions on a stepped-down schedule to 80% below 1990 levels by the year 2050. Implementing efforts recognize San Francisco's Community Choice Aggregation program as a key contributor to achieving those goals.

Consistent with City policy and SFPUC Resolution 11-0035, a principal objective of the CleanPowerSF program is to facilitate the City's shift to a greenhouse gas free electric energy supply. Toward these ends and to the extent economically and financially feasible, CleanPowerSF's energy portfolio carbon content shall be lower than the levels of carbon in Pacific Gas and Electric Company's electricity resource portfolio. Consistent with City policy and as economically and operationally feasible, CleanPowerSF will endeavor to reduce the total carbon content in its electricity resource portfolio over time with a goal of providing a carbon free electricity service no later than 2030.

For purposes of firming and shaping the electricity portfolio used to serve customers, CleanPowerSF will not utilize specified purchases of coal or nuclear energy.

## Rate Setting Policy

As established in Ordinance 146-07, management and control of the CleanPowerSF program is being undertaken by the SFPUC pursuant to its responsibilities and authority under the Charter. As such, CleanPowerSF rates are set by the SFPUC Commission (Commission) pursuant to the authority and provisions set forth by the Charter (Section 8B.125). Among other things, the Charter requires the SFPUC to set rates, after one or more public hearings, based on the cost of service, and at levels sufficient to provide sufficient resources for the continued financial health (including appropriate reserves), operation, maintenance and repair of each enterprise.

SFPUC staff has estimated the cost to provide CleanPowerSF service, and conducted a risk assessment that identified and quantified potential variations in cost and revenue resulting from changes in key program assumptions. This effort demonstrates the viability of the program to meet program objectives, and forms the basis for the Commission to set rates for the initial program launch.

The Commission will adopt budgets and establish cost-based retail rates for CleanPowerSF that provide sufficient revenue for the continued financial health of CleanPowerSF. Program rates will be adequate to support program operations, including maintaining revenues necessary to pay CleanPowerSF's obligations under its power supply and other contracts, and future projects, taking into consideration program goals.

CleanPowerSF rates shall be adopted in a manner that is consistent with the SFPUC's Rates Policy principles, balancing *affordability, compliance, sufficiency, and transparency*. All CleanPowerSF budgets, rates, fees, and charges presented by SFPUC staff to the Commission will conform to the SFPUC Rates Policy. Any proposed deviations from this policy will be reported to the Commission along with any resulting impact to CleanPowerSF ratepayers.

In adopting rates for CleanPowerSF, the SFPUC will endeavor to minimize rate volatility. CleanPowerSF rates will be reviewed annually for the upcoming fiscal year and adjusted, as needed, to ensure sufficient revenue to meet its contractual, legal and regulatory obligations, while providing for program affordability.

## Phasing Policy

It is the policy of the SFPUC that the CleanPowerSF program will be phased-in throughout San Francisco in a manner that is financially prudent and operationally feasible.

Initial and subsequent CleanPowerSF customer enrollments shall be conditional upon:

- Program rates being sufficient to cover program costs with rates 0.25% below PG&E generation rates when the program launches in 2016;
- Rates for a subsequent phase are projected to be at or below PG&E rates at the launch of each phase;
- Program supply commitments are sufficient to meet new projected customer demand;
- Staff and systems and/or qualified third party service providers can handle additional energy sales and customer account volumes;
- Sufficient and reasonably priced credit, collateral and working capital support is available; and
- All rate, contracts and financial support approvals have been obtained.

## Supply Management Policy

In Ordinance 124-01, and again in Resolution 227-08, the City adopted policies prioritizing energy efficiency and conservation, demand response, renewable generation, distributed generation, and clean and efficient fossil-fired generation, in that order, to provide for a reliable, affordable electric supply. This prioritization, referred to as the “energy loading order”, supports the City’s efforts to reduce the impact of electric supply choices on the environment and to further its environmental justice goals.

As a retail electric service provider, CleanPowerSF will engage in several types of electricity procurement activities for an array of energy-related products. These products may include those related to energy, ancillary services, energy transmission and others that may be defined through legislative, regulatory and market design changes. CleanPowerSF’s procurement activities may include competitive solicitations, bilateral negotiations, programmatic purchases and activities (e.g., energy efficiency and feed-in tariff purchases), project development and participation in the markets run by the California Independent System Operator. As it engages in these procurement activities, CleanPowerSF will implement the City’s energy loading order.

CleanPowerSF initially will manage its supply costs in the near and mid-term by entering into fixed price contracts for specified volumes using contracts with qualified suppliers pursuant to its August 2015 Request for Offers.

After the first year of operation, CleanPowerSF will maintain a modest open position for mid-term and long-term supplies to provide flexibility to adapt to market conditions as they arise. To the greatest extent possible, CleanPowerSF will seek to develop a resource portfolio that is diverse from a resource/technology and supplier standpoint. To the extent Hetch Hetchy supplies are available, sales to CleanPowerSF shall be undertaken at fair market value, when not adverse to the public utility ratepayers of the Power Enterprise. CleanPowerSF power supply procurement activity and performance will be reviewed monthly, quarterly and annually.

Consistent with utility industry best practices, CleanPowerSF will conduct an annual Integrated Resource Planning (IRP) process to identify near-term and mid-term power supply needs and inform annual power purchasing activities, taking into account demand reductions projected to result from energy efficiency and demand response activities. The IRP process will (1) quantify CleanPowerSF’s energy resource needs over a 10-year planning period; (2) prioritize resource acquisition preferences and set forth other relevant energy supply policies; and (3) provide guidance to programmatic purchases and activities, electricity purchasing and resource development processes undertaken by CleanPowerSF staff. The IRP process will be conducted and presented to the Commission each year following the first year of service.

CleanPowerSF shall develop and implement processes that monitor and manage power supply cost and risk, consistent with best utility industry practice. CleanPowerSF's risk management practices shall include methods to model and calculate portfolio cost based on low probability circumstances (for example a 5% probability) and shall establish tolerance bands, which require reporting and corrective action, if exceeded. CleanPowerSF staff shall present its power supply risk management practices to the Commission on an annual basis.

The development of local clean energy projects and jobs is one of the objectives of the CleanPowerSF program. The clean energy project and job opportunities CleanPowerSF presents include employment in program administration and operation, behind-the-meter efficiency and generation services, electric vehicle charging and energy storage infrastructure development, and power supply.

To begin to achieve this objective in the near-term, CleanPowerSF will focus on regular, standardized power purchasing with an identified preference for local and regional projects, where cost-effective. CleanPowerSF will also develop and provide Net Energy Metering (for customer-sited behind-the-meter projects); a Feed-in Tariff program (to purchase power from new local projects); and will issue solicitations for the construction of new local and regional renewable energy and storage projects on City-owned and controlled property. Before making any future decisions to construct or cause the construction of specific renewable energy projects subject to the California Environmental Quality Act (CEQA) the SFPUC shall consider any environmental review documents prepared by the City or other lead agency in compliance with CEQA and, if it approves such projects, the SFPUC shall adopt any required CEQA findings as part of such approval actions. Additionally, to help encourage investment in local rooftop solar, CleanPowerSF customers will continue to be eligible for GoSolarSF incentive funds.

CleanPowerSF will ensure customers remain eligible for PG&E services beyond energy supply or develop comparable, more locally-responsive services to be provided by CleanPowerSF. For energy efficiency and demand response programs, CleanPowerSF will focus initially on helping customers understand the opportunities available to them from existing ratepayer-funded programs and then expand, starting with locally-responsive energy efficiency, storage and demand response pilot programs.

CleanPowerSF will balance local project funding with affordability, financial needs, and renewable content enhancements, while establishing spending limits to mitigate the risks of high costs and project failure.



## Reserves Policy

The SFPUC will prudently manage CleanPowerSF operations in a manner that supports its long-term financial independence and stability, provides sufficient financial capacity to bridge shortfalls in cash flow and covers unanticipated expenditures, while at the same time reduces susceptibility to emergency rate increases due to revenue shortfalls and considers ratepayer impact and fairness.

Prudent reserve policies are critical to securing favorable commercial terms from both third-party service providers and lenders and to the development of a future stand-alone CleanPowerSF credit rating.

Consistent with this policy and with the San Francisco Charter, the SFPUC will adopt budgets and establish rates for CleanPowerSF that provide for adequate ratepayer protection in the form of an Operating Reserve Fund and a Contingency/Rate Stabilization Reserve Fund.

These Funds will be established at the following funding levels to mitigate short-term, unanticipated loss of revenues or increase in expenses; stabilize rates; and support the growth of the program:

- Operating Reserve Fund: equal to 90 days of operating expenditures; and
- Contingency/Rate Stabilization Reserve Fund: equal to 15% of projected annual revenues.

The SFPUC will adopt budgets and establish rates for CleanPowerSF with the goal of building up to the above target reserves funding levels within three years of program launch.

**Program Performance Reporting Policy and Metrics**

On an annual basis, CleanPowerSF shall report to the Commission on the program's performance in the following areas and measures.

PERFORMANCE AREA	METRIC
<b>Renewable Energy Content</b>	Percentage (%) of power supply from renewable energy and resource types  Location of projects supplying energy
<b>Local Energy Production and Savings</b>	Amount of energy produced and saved locally (MWh)  Amount of capacity and energy supplied behind-the-meter (MW and MWh)
<b>Environmental Benefits</b>	GHG content of energy supplied (lbs/MWh)  Citywide GHGs reduced (lbs CO <sub>2</sub> e)
<b>Economic and Social Benefits</b>	Direct and indirect jobs created (# job-years)  Customer bill savings, including energy efficiency and net metering (\$ and % saved)
<b>Financial Metrics</b>	Progress toward reserves balance targets  Debt coverage ratio

Appendix A-2: Regulatory Engagement References

Compliance Requirements

Report Name	Description	Reporting Agency	Frequency
CAISO Officer Certification	Indicates and confirms requirements for participating in the CAISO market	CAISO	Annual
Voluntary Renewable Energy Report (CARB VRE)	Reporting to the ARB for voluntary REC retirement within the cap and trade regulation	CARB	Annual
Annual Retail Sales Report (CARB MRR)	Reports on greenhouse gases by major sources	CARB	Annual
Wind Power Purchases-Form 1386	Reports on all California wind power purchases of 1MW or more	CEC	Quarterly
IEPR-Demand Forecast	Projections of electricity planning for the next decade	CEC	Biennial (odd years)
IEPR-Resource Plans Update	Updates to changes in IEPR Demand Forecast report	CEC	Biennial (even years)
Power Source Disclosure	Inventory of all source-specific power purchases completed during the previous calendar year (REC-only and bundled)	CEC	Annual
QFER 1306B	Reports on location, revenue, and sales amounts of energy supply	CEC	Quarterly
Resource Adequacy (Historical Load Data-Previous Year)	Recorded demand by hour; recorded customer counts by month for residential, small commercial, large commercial, industrial, agricultural	CEC	Annual
RPS Closing Report	Finalized RPS report for the prior compliance period	CEC	As Requested
Resource Adequacy (Load Forecast Update)	Recorded and forecasted peak demand by month; residential, commercial, industrial, and agricultural if forecast has changed	CEC	As Needed
Resource Adequacy (Load Forecast-Year Ahead)	Energy by month; peak demand by month for residential and non-residential; recorded and forecast customers by month for residential and non-residential	CEC	Annual
Resource Adequacy (Compliance Demonstration: System, Local, Flexible)	Recorded and forecast peak demand by month; recorded and forecast customer counts by month for residential, commercial, industrial, and agricultural	CEC/CPUC/CAISO	Monthly

Report Name	Description	Reporting Agency	Frequency
Resource Adequacy (Year Ahead Compliance Demonstration Local/System-- Follows April Forecast)	Contracted Net Qualifying Capacity for 100% of local and flexible RA obligation for each month of the following calendar year	CEC/CPUC/CAISO	Annual
AMI Data Privacy Audit	Independent audit and report on internal AMI data privacy and security practices	CPUC	Triennial
AMI Data Privacy Report	Reports on third party access to AMI data and any data security breaches	CPUC	Annual
Energy Storage Tier 2 Advice Letter	Reports on energy storage procurement and obligations	CPUC	Biennial
GHG Emission Performance Standard Advice Letter	Indicates new resources that contracted with to ensure low/no emissions	CPUC	Annual
Resource Adequacy (Price Data Request)	Data request for RA contract pricing and volumes	CPUC	As Requested
RPS Procurement Plan	Future looking RPS procurement plan	CPUC	Annual
RPS Report	Report to demonstrate compliance with the state Renewable Portfolio Standard	CPUC	Annual
EIA 826	Monthly electric utility sales and revenue report	U.S. DOE	Monthly
EIA 861	Annual Electric Power Industry Report (peak load, generation, electric purchases, sales, revenues, customer counts and DSM programs, green pricing NEM, and DG capacity)	U.S. DOE	Annual
WREGIS REC Retirement Report	All retired RECs whether Bucket 1, 2, 3 or grandfathered	WREGIS	Annual

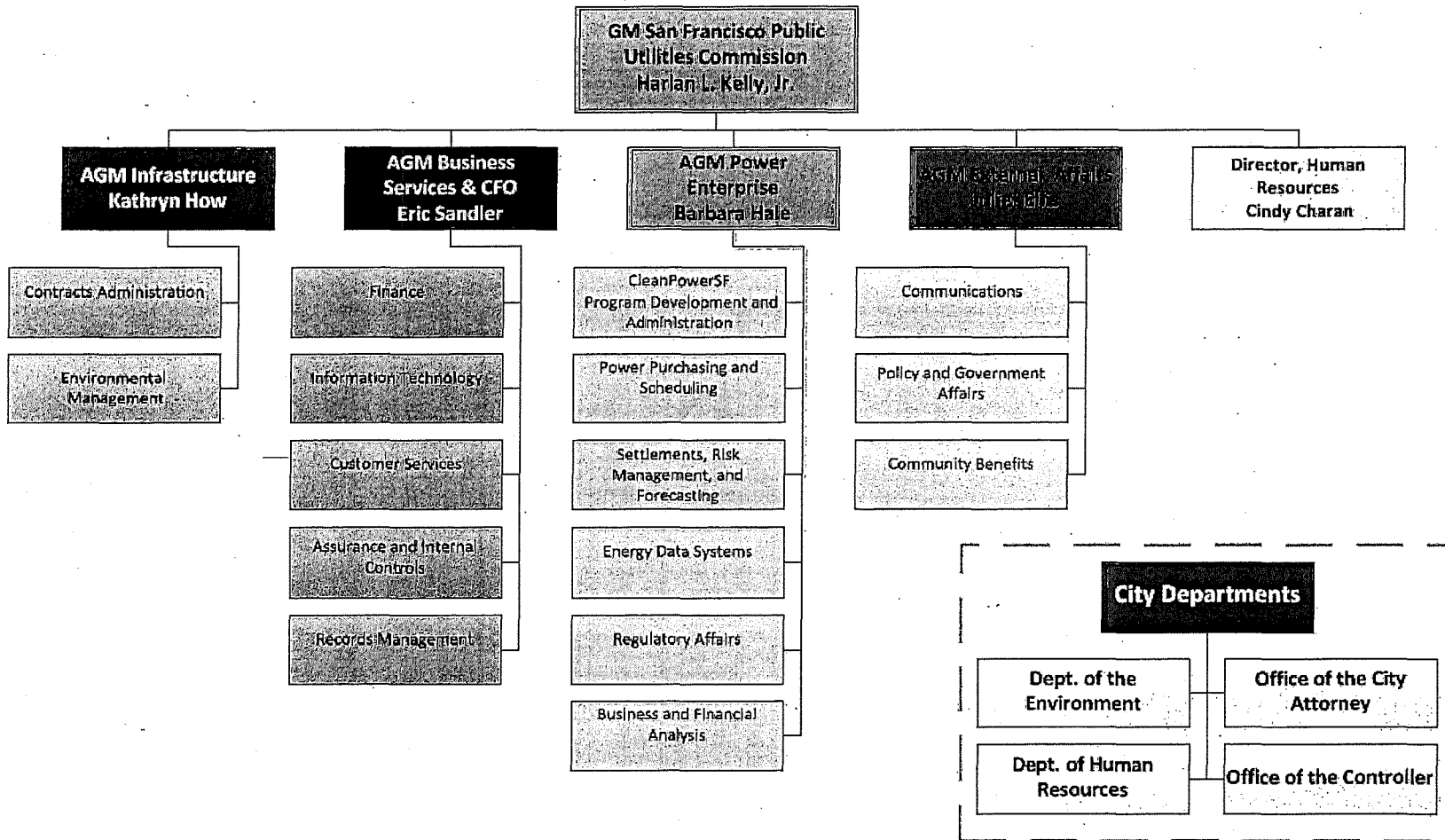
**Regulatory Proceedings**

Title	Type	Proceeding	Level of Engagement
PG&E 2017 GRC	Cost Allocation	A.15-09-001	Active
PG&E GRC Phase 2	Cost Allocation	A.16-06-013	Active
PG&E Proposal for the Closure of Diablo Canyon	Cost Allocation	A.16-08-006	Active
2016-2017 Resource Adequacy	Standards	R.14-10-010	Active
IRP and Long-term Procurement Planning	Standards	R.16-02-007	Active
Further Development of RPS	Standards	R.15-02-020	Active
Integrated Distributed Energy Resources	Innovation	R.14-10-003	Active
Distribution Resource Plan Rulemaking	Innovation	R.14-08-013	Active

CleanPowerSF Growth Plan (May 2017)

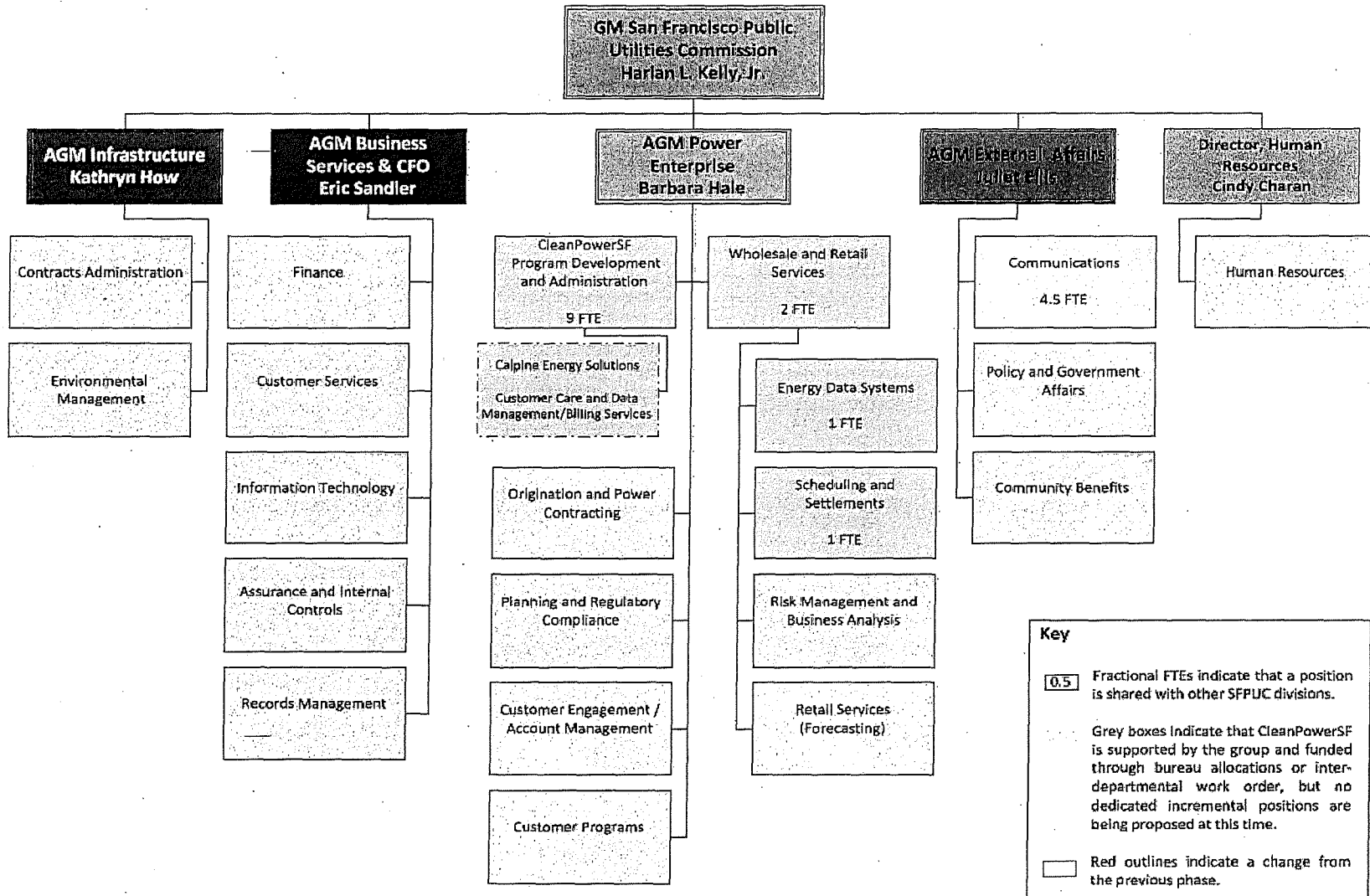
Title	Type	Proceeding	Level of Engagement
Power Source Disclosure Program	CEC	CEC	Active
PG&E's 2017 ERRR Forecast Application	Cost Allocation	A.16-06-003	Active
Implement AB 117	Standards	R.03-10-003	Active
RPS Implementation and Administration	Cost Allocation	R.08-08-009	Monitoring
Energy Storage Roadmap	Standards	R.15-03-011	Monitoring
PG&E Electric Vehicle Application	Innovation	A.15-02-009	Monitoring
Energy Efficiency Rulemaking	Efficiency	R.13-11-005	Monitoring
IOU CARE Applications 2015-2016	Efficiency	A.14-11-007, et al.	Monitoring
MCE Energy Efficiency Application	Efficiency	A.15-10-014	Monitoring
Regional Resource Adequacy	CAISO	CAISO	Monitoring
Integrated Energy Policy Report 2016	CEC	CEC	Monitoring
PG&E 2015 ERRR Forecast	Cost Allocation	A.14-05-024	Monitoring
Energy Upgrade California (Implementation)	Cost Allocation	A.12-08-007	Monitoring
Green Tariffs Shared Renewables	Cost Allocation	A.12-01-008	Monitoring
Successor to Existing NEM Tariffs	Standards	A.12-08-007	Monitoring
Distributed Generation Rulemaking	Standards	R.12-11-005	Monitoring
Residential Rate Rulemaking	Standards	R.12-06-013	Monitoring
Time-of-Use Rates	Standards	R.15-12-012	Monitoring
Renewables Portfolio Standard	Standards	R.11-05-005	Monitoring
Alternative Fuel Electric Vehicles	Innovation	R.13-11-007	Monitoring
Demand Response Rulemaking	Innovation	R.13-09-011	Monitoring
PG&E Energy Storage	Innovation	A.16-04-024	Monitoring
Water Energy Nexus	Efficiency	R.13-12-011	Monitoring
CAISO – Transmission Access Charge	CAISO	CAISO	Monitoring
Regional Grid Operator Governance Structure	CAISO	CAISO	Monitoring
Low Carbon Fuel Standard (LCFS)	CARB	CARB	Monitoring
Mandatory Reporting Requirement	CARB	CARB	Monitoring
Cap & Trade ("C&T")	CARB	CARB	Monitoring

Appendix A-3: CleanPowerSF Organizational Chart

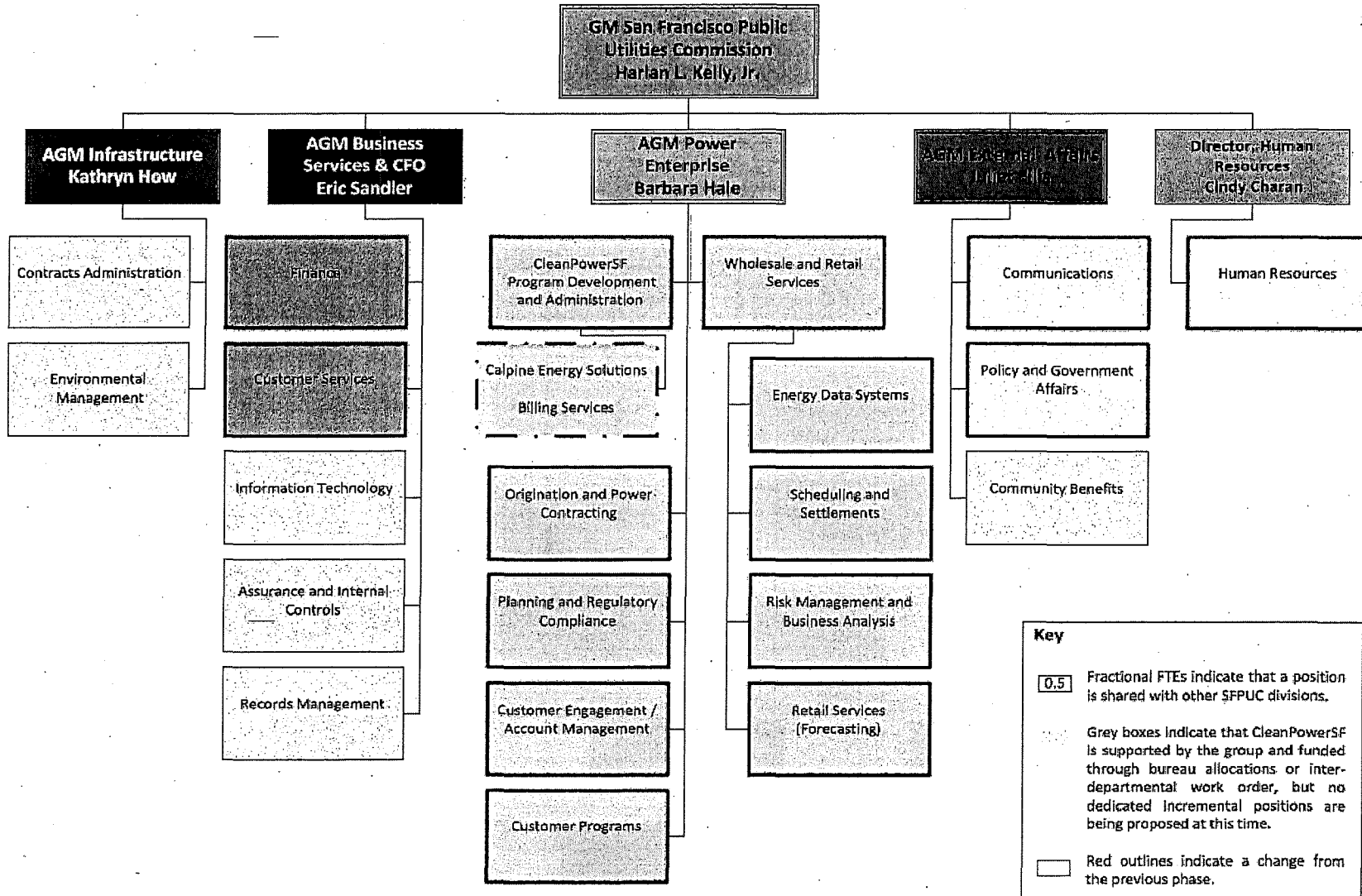


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Appendix A-4: Current CleanPowerSF Staffing Levels



Appendix A-5: CleanPowerSF Staffing Levels at Full Scale





Appendix A-6: Proforma Customer Enrollment and Sales Assumptions

Variable	Scenario 1		Scenario 2	Scenario 3		Post-Phase / "Steady-State" Assumptions
	Reserve-based Expansion: Phase 2	Reserve-based Expansion: Phase 3	Single Phase Expansion (Phase 2 Only)	Two-Phase Expansion: Phase 2	Two-Phase Expansion: Phase 3	
Year	FYE 2019	FYE 2023	FYE 2018	FYE 2018	FYE 2019	N/A
Total Customers Enrolled	202,000 (Add'l 118,000)	394,000 (Add'l 192,000)	394,000 (Add'l 310,000)	243,000 (Add'l 159,000)	394,000 (Add'l 151,000)	
Non-Participation Rate (opt-out + 3% vacancy rate)	8%	7%	10%	8%	10%	None
Active Customer Count	185,000	368,000	357,000	223,000	362,000	Customer base grows by 0.5%
Annual Sales Volume (MWh)	1,768,000	3,777,000	3,682,000	2,364,000	3,732,000	Grows by 0.5%
<i>SuperGreen</i> Participation Rate	2.1% Residential: 2.5% Non-Res: 0.3%	4.1% Residential: 5.0% Non-Res: 2.0%	2.0% Residential: 2.5% Non-Res: 0.3%	2.3% Residential: 2.5% Non-Res: 0.3%	2.8% Residential: 3.5% Non-Res: 0.6%	Gradually increases annually to 5% by 2026
% <i>SuperGreen</i> Sales in First Year	1.2%	3.1%	1.1%	1.2%	1.7%	Gradually increases annually until 5% by 2026

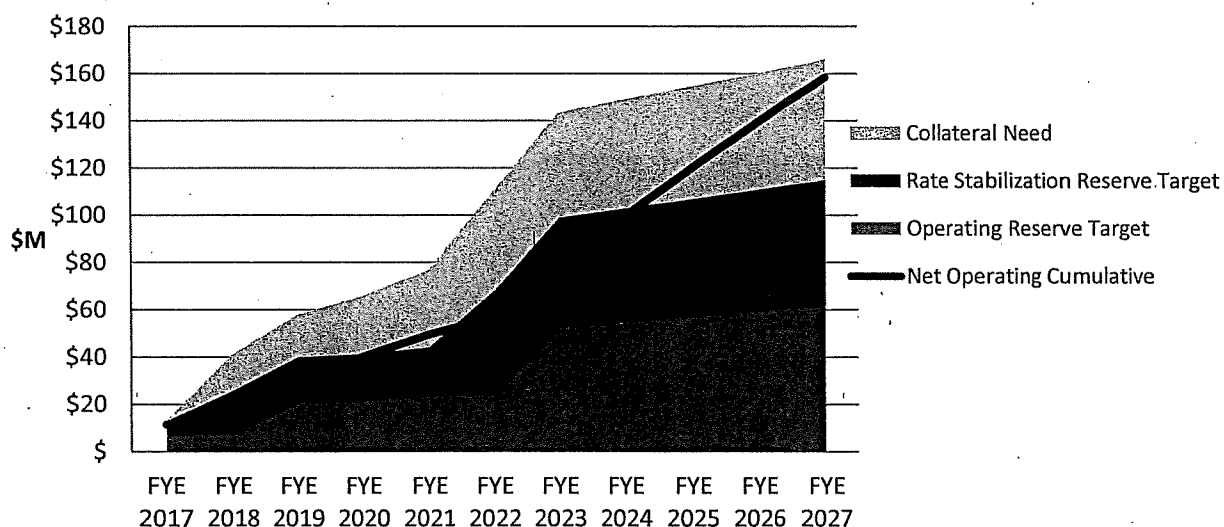
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Appendix A-7: Scenario 1 – 2015 Business Plan Phasing Strategy

Table A-7.1: Projected Sources and Uses (FYE 17 – FYE 22)

	FYE 2017	FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022
<b>SOURCES</b>						
Green Sales Revenue	\$33.5M	\$42.6M	\$123.3M	\$126.8M	\$130.5M	\$134.5M
SuperGreen Sales Revenue	\$0.4M	\$0.5M	\$1.8M	\$2.7M	\$3.6M	\$4.2M
Uncollectibles	(\$0.2M)	(\$0.2M)	(\$0.6M)	(\$0.6M)	(\$0.7M)	(\$0.7M)
<b>Total Sources</b>	<b>\$33.7M</b>	<b>\$42.8M</b>	<b>\$124.4M</b>	<b>\$128.8M</b>	<b>\$133.4M</b>	<b>\$138.0M</b>
<b>USES</b>						
Energy Supply	\$22.6M	\$30.2M	\$90.9M	\$97.7M	\$105.4M	\$111.8M
Operating Costs	\$5.8M	\$9.5M	\$15.9M	\$16.3M	\$16.8M	\$18.4M
Debt	\$0.8M	\$2.0M	\$2.0M	\$2.0M	\$1.3M	\$0.0M
SuperGreen Programs/Projects	\$0.1M	\$0.1M	\$0.3M	\$0.4M	\$0.5M	\$0.6M
Contribution to Reserves	\$4.4M	\$1.1M	\$15.3M	\$12.4M	\$9.4M	\$7.2M
<b>Total Uses</b>	<b>\$33.7M</b>	<b>\$42.8M</b>	<b>\$124.4M</b>	<b>\$128.8M</b>	<b>\$133.4M</b>	<b>\$138.0M</b>
<b>RESERVE BALANCES (TARGET)</b>						
Operating Reserve	\$6.8M	\$7.2M	\$20.7M	\$21.3M	\$23.4M	\$24.1M
Contingency/Rate Stab. Reserve	\$6.5M	\$18.8M	\$19.4M	\$20.1M	\$20.8M	\$44.2M
<b>RESERVE BALANCES (CUMULATIVE)</b>						
Operating Reserve	\$6.8M	\$7.2M	\$20.7M	\$21.3M	\$23.4M	\$24.1M
Contingency/Rate Stab. Reserve	\$4.7M	\$5.3M	\$7.1M	\$18.8M	\$20.8M	\$32.6M
<b>RESERVE TARGET MET?</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>YES</b>	<b>YES</b>	<b>NO</b>

Figure A-7.1: Projected Cumulative Net Margin and Reserves (Scenario 1)

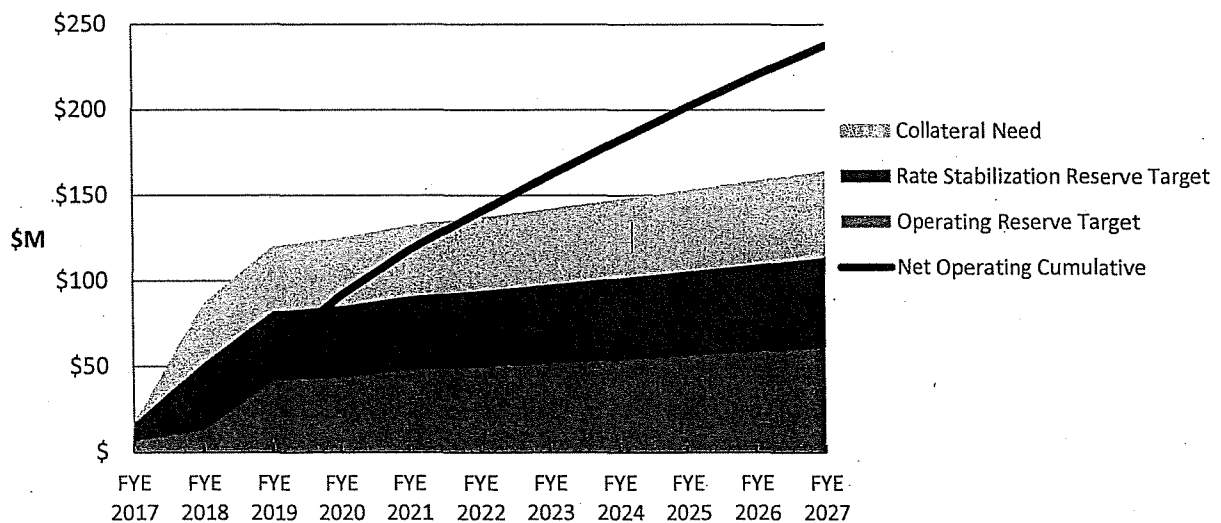


Appendix A-8: Scenario 2 – Single Phase Expansion Proforma Results

Table A-8.1: Projected Sources and Uses

	FYE 2017	FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022
<b>SOURCES</b>						
Green Sales Revenue	\$33.5M	\$70.3M	\$256.2M	\$263.4M	\$271.0M	\$279.3M
SuperGreen Sales Revenue	\$0.4M	\$0.7M	\$3.4M	\$5.3M	\$7.1M	\$8.4M
Uncollectibles	(\$0.2M)	(\$0.4M)	(\$1.3M)	(\$1.3M)	(\$1.4M)	(\$1.4M)
<b>Total Sources</b>	<b>\$33.7M</b>	<b>\$70.6M</b>	<b>\$258.3M</b>	<b>\$267.4M</b>	<b>\$276.7M</b>	<b>\$286.3M</b>
<b>USES</b>						
Energy Supply	\$22.6M	\$45.5M	\$190.5M	\$203.4M	\$219.0M	\$232.6M
Operating Costs	\$5.8M	\$13.0M	\$27.9M	\$28.6M	\$29.3M	\$30.0M
Debt	\$0.8M	\$2.0M	\$2.0M	\$2.0M	\$1.3M	\$0.0M
SuperGreen Programs/Projects	\$0.1M	\$0.1M	\$0.6M	\$0.8M	\$1.1M	\$1.2M
Contribution to Reserves	\$4.4M	\$10.0M	\$37.3M	\$32.6M	\$26.1M	\$22.5M
<b>Total Uses</b>	<b>\$33.7M</b>	<b>\$70.6M</b>	<b>\$258.3M</b>	<b>\$267.4M</b>	<b>\$276.7M</b>	<b>\$286.3M</b>
<b>RESERVE BALANCES (TARGET)</b>						
Operating Reserve	\$6.8M	\$13.6M	\$42.1M	\$43.9M	\$48.1M	\$49.8M
Contingency/Rate Stab. Reserve	\$10.6M	\$38.9M	\$40.3M	\$41.7M	\$43.2M	\$44.7M
<b>RESERVE BALANCES (CUMULATIVE)</b>						
Operating Reserve	\$6.8M	\$13.6M	\$42.1M	\$43.9M	\$48.1M	\$49.8M
Contingency/Rate Stab. Reserve	\$4.7M	\$7.9M	\$16.7M	\$41.7M	\$43.2M	\$44.7M
<b>RESERVE TARGET MET?</b>	NO	NO	NO	YES	YES	YES

Figure A-8.1: Projected Cumulative Net Margin and Reserves (Scenario 2)

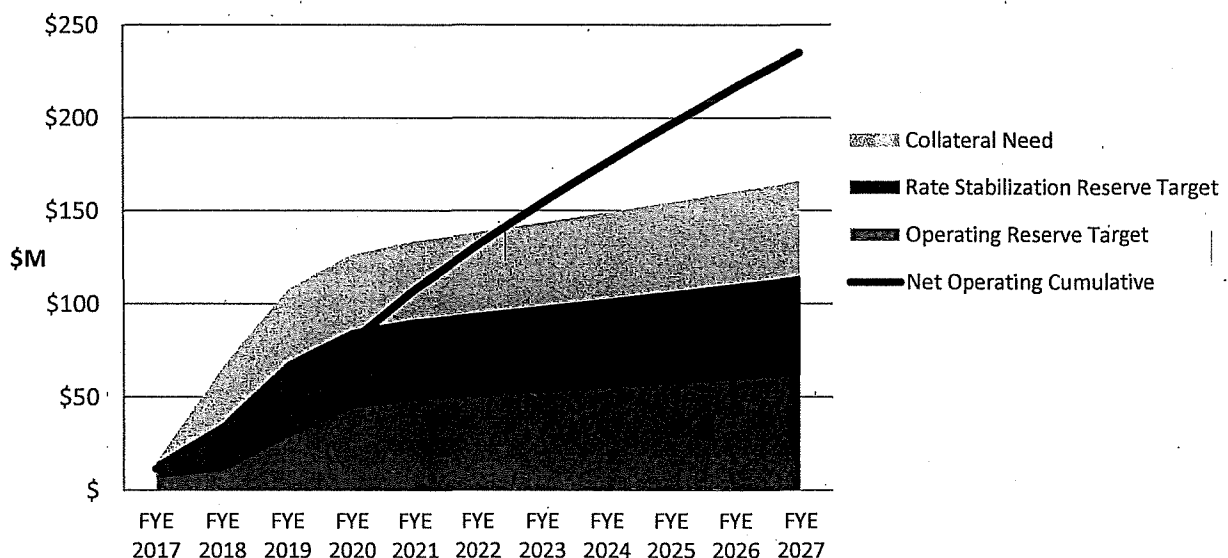


Appendix A-9: Scenario 3 – Two-Phase Expansion Proforma Results

Table A-9.1: Projected Sources and Uses

	FYE 2017	FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022
<b>SOURCES</b>						
Green Sales Revenue	\$33.5M	\$55.3M	\$170.1M	\$266.0M	\$273.7M	\$282.1M
SuperGreen Sales Revenue	\$0.4M	\$0.6M	\$2.5M	\$5.4M	\$7.2M	\$8.5M
Uncollectibles	(\$0.2M)	(\$0.3M)	(\$0.9M)	(\$1.4M)	(\$1.4M)	(\$1.5M)
<b>Total Sources</b>	<b>\$33.7M</b>	<b>\$55.6M</b>	<b>\$171.7M</b>	<b>\$270.1M</b>	<b>\$279.5M</b>	<b>\$289.1M</b>
<b>USES</b>						
Energy Supply	\$22.6M	\$36.7M	\$121.1M	\$205.3M	\$221.2M	\$234.9M
Operating Costs	\$5.8M	\$10.4M	\$19.8M	\$28.1M	\$28.7M	\$29.4M
Debt	\$0.8M	\$2.0M	\$2.0M	\$2.0M	\$1.3M	\$0.0M
SuperGreen Programs/Projects	\$0.1M	\$0.1M	\$0.4M	\$0.9M	\$1.1M	\$1.2M
Contribution to Reserves	\$4.4M	\$6.5M	\$28.4M	\$33.9M	\$27.3M	\$23.6M
<b>Total Uses</b>	<b>\$33.7M</b>	<b>\$55.6M</b>	<b>\$171.7M</b>	<b>\$270.1M</b>	<b>\$279.5M</b>	<b>\$289.1M</b>
<b>RESERVE BALANCES (TARGET)</b>						
Operating Reserve	\$6.8M	\$10.5M	\$28.6M	\$44.3M	\$48.5M	\$50.3M
Contingency/Rate Stab. Reserve	\$8.4M	\$25.9M	\$40.7M	\$42.1M	\$43.6M	\$45.1M
<b>RESERVE BALANCES (CUMULATIVE)</b>						
Operating Reserve	\$6.8M	\$10.5M	\$28.6M	\$44.3M	\$48.5M	\$50.3M
Contingency/Rate Stab. Reserve	\$4.7M	\$7.4M	\$17.8M	\$36.0M	\$43.6M	\$45.1M
<b>RESERVE TARGET MET?</b>	<b>NO</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>

Figure A-9.1: Projected Cumulative Net Margin and Reserves (Scenario 3)



# **Request for Proposals:**

**2017 Bank Credit Facility for CleanPowerSF**

**Agreement No. PUC.PRO.0084**

**7/18/2017**



**San Francisco**  
**Water Power Sewer**

Services of the San Francisco Public Utilities Commission

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# 1. INTRODUCTION

The San Francisco Public Utilities Commission (“SFPUC”) seeks proposals for bank credit facilities (the “Credit Facilities”) in an amount of up to \$150 million to provide for the issuance of one or more standby letters of credit to secure CleanPowerSF’s obligations pursuant to Power Purchase Agreements (“PPAs”) with one or more energy suppliers and to provide for other CleanPowerSF borrowings and drawdowns as described herein. The SFPUC’s reimbursement obligation under the Credit Facility will be payable solely from revenues of CleanPowerSF, also as described herein.

## 1.1. The SFPUC

The SFPUC is a department of the City and County of San Francisco (“City”) responsible for the maintenance, operation and development of three utility enterprises: the Water Enterprise, the Wastewater Enterprise and the Power Enterprise (which is a component of Hetch Hetchy Water and Power). The SFPUC’s enterprises are operated and managed as separate financial entities with separate enterprise funds.

### Water Enterprise.

Nearly 2.6 million people rely on water supplied by the SFPUC to meet their daily water needs through its Water Enterprise. The SFPUC serves as the retail water supplier for the City and is responsible for water deliveries to residents and institutions within the City limits, as well as to a number of retail accounts outside of the City limits (“Retail Customers”). In addition, the SFPUC sells water to 27 Wholesale Customer entities in San Mateo, Alameda and Santa Clara Counties under a Water Supply Agreement and related individual contractual agreements. Approximately 67% of the SFPUC’s water supply is delivered to the Wholesale Customers and approximately 33% of the SFPUC’s remaining water supply is delivered to its Retail Customers.

### Wastewater Enterprise.

The Wastewater Enterprise’s collection and treatment system consists of a combined sewer collection system conveying sewage (sanitary and stormwater flows) within the City to three water pollution control plants, also located within the City. Treated effluent flows are then discharged through deep-water outfalls into the San Francisco Bay and Pacific Ocean. The Wastewater Enterprise also currently provides sewage treatment service on Treasure Island pursuant to contract, and operates an onsite sewage and stormwater reclamation and treatment facility at the SFPUC headquarters at 525 Golden Gate Avenue.

### Hetch Hetchy – Water and Power Operations.

Hetch Hetchy Water and Power operates the Hetch Hetchy Project, which provides water for distribution through the Water Enterprise and hydroelectric power to the Power Enterprise. The Power Enterprise, which is a component of the Hetch Hetchy Project, was created in February 2005 as a separate system within Hetch Hetchy Water and Power. The Power

Enterprise focuses on providing adequate and reliable supplies of electric power to meet the municipal requirements of the City, including power to operate municipal streetcars and electric buses, street and traffic lights, municipal buildings and other City facilities, including SFO. Additionally, the Power Enterprise provides power to the Modesto and Turlock Irrigation Districts, located in the central valley of California, and to other commercial customers consistent with prescribed contractual obligations and federal law.

The San Francisco Board of Supervisors adopted Ordinance 86-04 in 2004 authorizing the establishment of a Community Choice Aggregation (“CCA”) program in San Francisco (“CleanPowerSF”). Pursuant to the San Francisco Charter, the SFPUC is responsible for the management of CleanPowerSF. As a division of the Power Enterprise, the CleanPowerSF program is under the direct administrative oversight of its Assistant General Manager, who in turn reports to the SFPUC General Manager. The program is funded by CleanPowerSF ratepayers. The goals of CleanPowerSF are to provide (1) affordable and reliable electricity services to San Francisco residents and businesses, (2) cleaner energy alternatives advancing the City’s Greenhouse Gas reduction goals; (3) investment in local renewable energy projects and jobs; and (4) long-term rate and financial stability.

## **2. CLEANPOWERSF**

The City, acting by and through the SFPUC, launched the first phase (“Phase One”) of CleanPowerSF on May 1, 2016. Today, CleanPowerSF is serving approximately 76,000 accounts with an average energy demand of 61 MW. The program has maintained an opt-out rate of about 3.4%, and has attracted more than 1,700 pre-enrollments and 2,350 upgrades to CleanPowerSF’s 100% renewable SuperGreen product.

CleanPowerSF purchased energy to support its Phase One launch principally through two power purchase agreements (the “Existing PPAs”), each in the form of a Master Power Purchase and Sale Agreement. The Existing PPAs provide for energy delivery through April 30, 2019 and May 31, 2021, respectively. Termination payments, if any, under the Existing PPAs are secured by standby letters of credit (the “Existing Standby LOCs”) which are in turn secured by revenues of SFPUC’s Power Enterprise. The Existing Standby LOCs were issued in an approximate aggregate initial amount of \$17,000,000 which has decreased to approximately \$14,000,000 as of the date of this RFP.

SFPUC’s Power Enterprise additionally supported CleanPowerSF’s Phase One launch through the provision of a loan (the “Power Enterprise Loan”) to provide funds for working capital and start-up expenses. The Power Enterprise Loan is presently outstanding at \$7,312,500 (May 31, 2017).

CleanPowerSF was reported as part of the Power Enterprise in the SFPUC’s FY 2015-16 Comprehensive Annual Financial Report. The SFPUC has prepared unaudited financial



statements for CleanPowerSF for the 9 months ended March 31, 2017 of FY 2015-16. These statements are attached hereto as Attachment A.

## **2.1. Pro Forma versus Actual Results to Date**

CleanPowerSF supported its initial launch with a pro forma financial projection (the “Initial Projection”) of expected results from operations. The Initial Projection, developed in January 2016, reflected a set of assumptions including a conservative “opt-out” rate of 20%.

CleanPowerSF’s opt-out results were significantly lower than projected (3.4% of customers). Lower opt-out rates, higher-than-expected elective opt-ins from customers not specifically targeted for enrollment, and the SFPUC’s decision to upsize the Phase One launch, have all contributed to a larger number of customers than projected. The impact of a larger customer count on energy sales was offset to some extent by the lower average energy-use-per-customer of residential customers in the neighborhoods included in Phase One, in comparison to City-wide averages. On the expense side, CleanPowerSF’s actual operating expenses were significantly lower than projected, reflecting factors including lower marketing expenses and higher-than-expected staff vacancies.

In terms of net revenues, CleanPowerSF significantly outperformed its Initial Projection. For the 11-month period beginning upon initial launch on May 1, 2016 through the end of March 2017, CleanPowerSF generated approximately \$5 million in net revenues, \$1.4 million higher (40%) than the Initial Projection amount of \$3.6 million. A comparison of the Initial Projection versus actual results through March 2017 is attached hereto as Attachment B. An Excel version of this comparison is included as Attachment D.

## **2.2. Program Expansion to City-Wide Service**

On May 9, 2017, SFPUC staff provided the SFPUC Commission (the SFPUC’s governing board) with the CleanPowerSF Growth Plan (the “CleanPowerSF Growth”) which recommended completing City-wide enrollment by Fiscal Year End 2019. In Resolution No 17-0102, the Commission modified the CleanPowerSF Program to enroll 100% of eligible San Francisco customers by July 2019, or sooner if possible. This expansion is expected to result in approximately 360,000 active customers with approximately 420 MW of average demand.

The timing and process for implementing City-wide rollout will depend on multiple factors, including operational, cost, rate-setting and other considerations. CleanPowerSF has provided two illustrative pro forma financial projections for CleanPowerSF Growth, attached hereto as Attachment C. The first of these projections (the “Single Phase Rollout”) shows projected financial results assuming a single program expansion in the second quarter of calendar 2018. The second of these projections (the “Two Phase Rollout”) shows projected financial results assuming two expansion phases—one in the second quarter of calendar 2018 and another in the second quarter of calendar 2019.

These pro forma projections are provided for informational purposes only, and reflect illustrative projections of strategies under consideration. The SFPUC has not committed to a specific implementation plan or plans.

### **2.3. Upcoming Power Purchases**

CleanPowerSF intends to support CleanPowerSF Growth through further power procurement activity. CleanPowerSF has issued a renewable energy request-for-offers (the “2017 Renewables RFO”) seeking proposals for renewable energy supply to CleanPowerSF. The 2017 Renewables RFO proposes a power purchase agreement structure in which power suppliers look only to CleanPowerSF revenues as their source of payment and are not further secured by standby letters of credit.

CleanPowerSF intends to issue a second energy request-for-offers in the next few months (the “2017 Energy RFO”) to acquire shaped energy to complement purchases made under the 2017 Renewables RFO and actual customer demand. CleanPowerSF expects to propose a credit structure in support of the 2017 Energy RFO in which power suppliers may be secured by standby letters of credit. The primary purpose of this RFP is to secure a credit commitment that will maximize CleanPowerSF’s power contracting flexibility.

### **2.4. CleanPowerSF Payment Obligations**

CleanPowerSF’s payment obligations are special limited obligations of CleanPowerSF, payable solely from the revenues of CleanPowerSF. CleanPowerSF’s payment obligations are not a charge upon the revenues of the SFPUC (and its Power Enterprise) or the general fund of the City and County of San Francisco or upon any non-CleanPowerSF moneys or other property of the SFPUC or the City. CleanPowerSF faces ongoing risks including the risk of customer opt-out. There is no guarantee that CleanPowerSF revenues shall be sufficient to cover its costs of operations at all times.

The SFPUC has not implemented a third-party financial lock-box to manage CleanPowerSF’s financial operations, and does not at this time expect to implement such a security feature in support of CleanPowerSF Growth. Rather, the SFPUC expects to continue to self-administer CleanPowerSF’s financial operations, as it self-administers the financial operations of its Water Enterprise, Wastewater Enterprise, and Power Enterprise.

### **2.5. CleanPowerSF Business Practices**

CleanPowerSF has established rate-setting, phasing, and reserves policies as set forth in its Business Practice Policies document, summarized below.

#### **Rate Setting Policy**

As established in Ordinance 146-07, management and control of the CleanPowerSF program is being undertaken by the SFPUC pursuant to its responsibilities and authority under the City Charter. As such, CleanPowerSF rates are set by the SFPUC Commission

pursuant to the authority and provisions set forth by the City Charter (Section 8B.125). Among other things, the Charter requires the SFPUC to set rates, after one or more public hearings, based on the cost of service, and at levels sufficient to provide sufficient resources for the continued financial health (including appropriate reserves), operation, maintenance and repair of each enterprise.

The Commission will adopt budgets and establish cost-based retail rates for CleanPowerSF that provide sufficient revenue for the continued financial health of CleanPowerSF. Program rates will be adequate to support program operations, including maintaining revenues necessary to pay CleanPowerSF's obligations under its power supply and other contracts, and future projects, taking into consideration program goals.

CleanPowerSF rates shall be adopted in a manner that is consistent with the SFPUC's Rates Policy principles, balancing affordability, compliance, sufficiency, and transparency. All CleanPowerSF budgets, rates, fees, and charges presented by SFPUC staff to the Commission will conform to the SFPUC Rates Policy. Any proposed deviations from this policy will be reported to the Commission along with any resulting impact to CleanPowerSF ratepayers.

In adopting rates for CleanPowerSF, the SFPUC will endeavor to minimize rate volatility. CleanPowerSF rates will be reviewed annually for the upcoming fiscal year and adjusted, as needed, to ensure sufficient revenue to meet its contractual, legal and regulatory obligations, while providing for program affordability.

#### **Phasing Policy**

It is the policy of the SFPUC that the CleanPowerSF program will be phased-in throughout San Francisco in a manner that is financially prudent and operationally feasible.

Initial and subsequent CleanPowerSF customer enrollments shall be conditional upon:

- Program rates being sufficient to cover program costs;
- Rates for a subsequent phase are projected to be at or below PG&E rates at the launch of each phase;
- Program supply commitments are sufficient to meet new projected customer demand;
- Staff and systems and/or qualified third party service providers can handle additional energy sales and customer account volumes;
- Sufficient and reasonably priced credit, collateral and working capital support is available; and

- All rate, contracts and financial support approvals have been obtained.

### **Reserves Policy**

The SFPUC will prudently manage CleanPowerSF operations in a manner that supports its long-term financial independence and stability, provides sufficient financial capacity to bridge shortfalls in cash flow and covers unanticipated expenditures, while at the same time reduces susceptibility to emergency rate increases due to revenue shortfalls and considers ratepayer impact and fairness.

Consistent with this policy and with the City Charter, the SFPUC will adopt budgets and establish rates for CleanPowerSF that provide for adequate ratepayer protection in the form of an Operating Reserve Fund and a Contingency/Rate Stabilization Reserve Fund.

These Funds will be established at the following funding levels to mitigate short-term, unanticipated loss of revenues or increase in expenses; stabilize rates; and support the growth of the program:

- Operating Reserve Fund: equal to 90 days of operating expenditures; and
- Contingency/Rate Stabilization Reserve Fund: equal to 15% of projected annual revenues.

The SFPUC will adopt budgets and establish rates for CleanPowerSF with the goal of building up to the above target reserves funding levels within three years of program launch.

## **2.6. Credit Provisions set Forth in Pro Forma PPAs**

CleanPowerSF has prepared pro forma power purchase agreements (the "Pro Forma PPAs") as part of its power supply solicitation. These Pro Forma PPAs set forth certain credit provisions regarding auto-appropriation, limited obligation, Controller certification, and the biannual budget process, that CleanPowerSF included in the Existing PPAs and anticipates implementing in support of its power procurement activities. The following summarizes these key PPA credit provisions.

### **Auto-Appropriating Designated Fund**

Buyer's (CleanPowerSF's) payment obligations under this Agreement (the Pro Forma PPA) shall be paid from an SFPUC designated fund that will automatically appropriate CleanPowerSF revenues on an annual basis without further Buyer action and which shall be used solely for CleanPowerSF costs and expenses, including the obligations under this Agreement. Buyer agrees to set CleanPowerSF rates and charges that are sufficient to maintain revenues necessary to pay its obligations under this Agreement and all of Buyer's payment obligations under its other contracts for the purchase of energy for CleanPowerSF. Buyer shall provide Seller (Provider) with reasonable access to account

balance information with respect to the SFPUC designated fund at all times during the Delivery Term.

**Limited Obligations**

Buyer's payment obligations are special limited obligations of the Buyer payable solely from the revenues of CleanPowerSF. Buyer's payment obligations under this Agreement are not a charge upon the revenues of the SFPUC (and its Power Enterprise) or the general fund of the City and County of San Francisco or upon any non-CleanPowerSF moneys or other property of the SFPUC or the City.

**Controller Certification.**

The Buyer's obligations hereunder shall not at any time exceed the amount certified by the Controller for the purpose and period stated in such certification. Except as may be provided by laws governing emergency procedures, officers and employees of Buyer are not authorized to request, and Buyer is not required to reimburse Seller for, commodities or services beyond the agreed upon Agreement scope unless the changed scope is authorized by amendment and approved as required by law. Officers and employees of Buyer are not authorized to offer or promise, nor is Buyer required to honor, any offered or promised additional funding in excess of the maximum amount of funding for which the contract is certified without certification of the additional amount by the Controller. The Controller is not authorized to make payments on any contract for which funds have not been certified as available in the budget or by supplemental appropriation.

**Biannual Budget Process.**

For each City biannual budget cycle during the term of this Agreement, Buyer agrees to take all necessary action to include the maximum amount of the Buyer's payment obligations under this Agreement in its budget submitted to the Board of Supervisors for that budget cycle.

**2.7. Ongoing CleanPowerSF Financial Reporting**

CleanPowerSF was reported as part of the Power Enterprise for the period ending June 30, 2016. Starting with FY 2016-17, CleanPowerSF will be presented as a major fund of Hetch Hetchy Water and Power.

In addition, CleanPowerSF intends to provide a monthly statement (the "Monthly Statement") to the provider of the Credit Facility in the format attached hereto as Attachment E.

**2.8. Links to Additional Background Information**

The following links to the SFPUC's official website provide an overview of the SFPUC and CleanPowerSF:

[www.sfwater.org](http://www.sfwater.org) – Official SFPUC website

[www.cleanpowersf.org](http://www.cleanpowersf.org) – Official CleanPowerSF website

### 3. BANK CREDIT FACILITY

The SFPUC seeks a Credit Facility of up to \$150 million. The Credit Facility may be applied for the following purposes:

1. To provide standby letters of credit (“New Standby LOCs”) to secure New PPAs supporting Program expansion;
2. To replace the Existing Standby LOCs supporting Existing PPAs;
3. To replace the Power Enterprise Loan; and/or
4. To provide CleanPowerSF working capital.

### 4. ESTIMATED TRANSACTION SCHEDULE

Activity	Date
Bidder’s Conference	Friday, July 28, 10:00 AM PDT
Deadline to submit questions or information requests	Tuesday, August 1, 12:00 PM PDT
Proposals due	Tuesday, August 15, 2017, 5:00 PM PDT
Notification of selected bank	Week of August 21st
Negotiate credit terms & finalize agreements (allow 2 – 3 months)	By mid-November 2017
Commission approval (Credit Facility & PPAs)	December 12, 2017
Board of Supervisors approval of PPAs	January 2018
Closing (Credit Facility & PPAs)	Week of February 5, 2018
Launch Phase 2	May 1, 2018

Per the above, it is estimated that the SFPUC Commission will approve the Credit Facility documents at its December 12, 2017 meeting. As such, all Bank documents must be prepared and distributed in near final draft form by early November. **Each Proposer must commit to meeting this schedule, and must confirm it as part of its response to this RFP.**

### 5. CHAPTERS 12B AND 12C REQUIREMENTS (EQUAL BENEFITS)

Effective June 1, 1997, Chapter 12B of the San Francisco Administrative Code was amended to prohibit the City from entering into contracts or leases with any entity that discriminates in the

provision of benefits between employees with domestic partners and employees with spouses, and/or between the domestic partners and spouses of employees. All proposing firms should be in the process of becoming compliant with Chapter 12B if not already compliant. The Contract Monitoring Division (CMD) has developed rules of procedure and various resource materials explaining the equal benefits program. These materials are available by calling the CMD Equal Benefits Section at (415) 581-2310 or by visiting the CMD website at [www.sfgov.org/cmd](http://www.sfgov.org/cmd).

## **6. PROPOSAL SUBMISSION**

### **6.1. Questions for Respondents**

Please provide short, concise responses to the following questions. See Submittal Requirements, below.

#### **1) Contact Information**

Provide the name, address, phone number and e-mail address of the contact person(s) authorized to answer questions and negotiate final terms and conditions on behalf of Respondent. Please also set forth any other members of your Bank who will be involved in the day-to-day negotiations and discussions with the SFPUC and its team.

#### **2) Firm Overview / Qualifications**

- a. Briefly describe the structure of your firm. What is the business unit within your firm that will book the Credit Facility you propose? Describe the credit approval process for that entity.
- b. What is your firm's total capital? What is your firm's net assets?
- c. Please provide your firm's short-term and long-term ratings from Moody's, Standard & Poor's and Fitch dating back to January 1, 2012. Please comment on any relevant events that may cause or that recently have caused any of the rating agencies to place these ratings under review. Please provide each rating agency's current outlook on your firm.

#### **3) Experience**

- a. What is your firm's experience with the SFPUC?
- b. What is your firm's experience in the CCA sector? Which CCA entities have you transacted with?
- c. What is your firm's experience, and the experience of the business unit within your firm that will book the Credit Facility you propose, in extending credit to non-rated entities?
- d. Briefly describe other relevant experience of your firm to the extent it is not captured in questions 3(a), (b), and (c).

#### **4) Proposed Terms**

Provide a detailed description, in term sheet format, of the Credit Facility you propose. If you are proposing multiple structures that would be more clearly conveyed in multiple term sheets, then you may submit more than one term sheet. Please include the following information:

- a. Facility Type(s)
- b. Obligor
- c. Commitment Size
- d. Tenor(s)
- e. Security
- f. Facility purpose
- g. Term-out provisions for reimbursement obligations under Standby LOCs (i.e. length of term-out, amortization requirements, interest rate or formula, and any conditions on availability)
- h. Renewal provisions
- i. Termination provisions
- j. CleanPowerSF Covenants (including CleanPowerSF financial reporting requirements)
- k. Any other relevant terms (e.g. increased cost, Most Favored Nation)

#### **5) Exceptions to RFP**

Identify any exceptions and/or modifications to the information provided in this RFP that your firm requires or proposes. For example, if your firm requires a third-party lock-box to support CleanPowerSF, state that as your requirement. As a second example, if your firm recommends (but does not require) a third-party lock-box, state that in your response, together with a short explanation of the benefit of your recommendation to CleanPowerSF and/or the SFPUC. As a third example, if your firm recommends a specific payment lien position as security for your proposed Credit Facility, then provide a description of that lien position along with your proposed pricing benefit.

#### **6) Pricing**

Provide a detailed description, as part of your term sheet, of the cost structure and fees for the Credit Facility you propose. Please include the following information:



- a. Commitment Fee. Please propose a schedule of commitment fees for commitment tenors of various lengths (i.e. two years, three years, four years, five years, etc.). Please indicate whether commitment fees will vary depending upon the commitment amount. Please also provide any other fees and charges associated with your proposed Credit Facility.
- b. Expenses. The SFPUC desires to set a limit on legal and out-of-pocket expenses incurred by the Credit Facility provider. Indicate: (i) a cap on the legal fees and expenses of counsel to your firm; and (ii) a cap on any other expenses to be incurred
- c. Interest rate on loans
- d. Amendment fees
- e. Any other fees

## **7) Legal Counsel**

Indicate the law firm and the lead attorney that will represent the Bank in this transaction. If foreign counsel is also required, please indicate the law firm and lead attorney. Please specify the proposed average hourly rate for which legal counsel will be compensated for representation of your firm.

## **6.2. Submittal Requirements**

The main body of your proposal must be limited to 15 pages, exclusive of a transmittal letter (limited to two pages) and any accompanying appendices. Proposers bear all costs associated with the preparation and submission of their proposal.

All proposals must be submitted online via the SFBid website ([www.sfbid.sfwater.org](http://www.sfbid.sfwater.org)). Detailed proposal response requirements are listed on the online response form within SFBid ("Proposal Response Form"). Please refer to the SFBid website and click the "Submit Proposal" button to view and complete the full Proposal Response Form.

Proposals must be submitted no later than **5:00 PM Pacific Daylight Time, Tuesday, August 15, 2017.**

For technical or procedural questions regarding the online submittal, please contact [sfbid@sfwater.org](mailto:sfbid@sfwater.org).

After reviewing the responses to this RFP, the SFPUC will notify respondents shortly thereafter, per the schedule set forth in Section 4 herein.

## 7. EVALUATION PROCESS

The SFPUC will evaluate proposals based on the following criteria:

Respondent Qualifications	10%
Experience	15%
Proposed Credit Terms & Provisions	35%
Fees and Pricing	40%

The SFPUC reserves the right to consider other factors than those specified above and to request additional information from Respondents as needed. The SFPUC reserves the right to cancel this solicitation without liability to the banks responding. The SFPUC does not anticipate conducting oral interviews for this RFP. However, the SFPUC reserves the right to contact any bidder for additional information or clarification of the terms of the proposal. The SFPUC has engaged Clean Energy Capital Securities LLC ("Clean Energy Capital") as its independent financial advisor with respect to CleanPowerSF's procurement of credit and power supply.

## 8. BIDDERS' CONFERENCE

A bidders' conference will be held on Friday, July 28th from 10:00 am to 12:00 PM Pacific Daylight Time. It will be conducted at the SFPUC's headquarters in San Francisco (525 Golden Gate Avenue, 3rd Floor Tuolumne Conference Room). Arrangements will be provided for telephonic participation in this conference. Questions regarding the RFP will be addressed at this conference and any new information will be provided at that time. While SFPUC staff and/or Clean Energy Capital may provide oral clarifications, explanations, or responses to any inquiries, the SFPUC is not bound by any oral representation. If any new and/or substantive information is provided in response to questions raised at the bidders' conference, such information will be memorialized in a written addendum to this RFP.

All questions and/or requests for information concerning the RFP, whether submitted before or after the bidders' conference, must be in writing and submitted via the SFBid website (<https://sfbid.sfwater.org/>). Substantive replies will be memorialized in written addenda to be made part of this RFP. All addenda will be posted on the SFBid website. No questions or requests for information will be accepted after August 1, 2017.

## **9. LIST OF ATTACHMENTS**

- A. CleanPowerSF unaudited financial statements for the 9 months ended March 31, 2017.
- B. Pro forma comparison: Initial Projection versus actual results through March 2017.
- C. Pro forma projections for City-Wide Rollout.
- D. Excel version of CleanPowerSF pro forma.
- E. Form of Monthly Statement for ongoing reporting of CleanPowerSF customers and revenues.

# **Request for Offers:**

**Shaped Energy Supplies**

**Agreement No. PUC.PRO.0089**

**9/8/2017**



**San Francisco**  
**Water Power Sewer**

Services of the San Francisco Public Utilities Commission

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# 1. INTRODUCTION AND BACKGROUND

The City and County of San Francisco (“City”), acting by and through its Public Utilities Commission, Power Enterprise (“SFPUC”), launched the first phase of CleanPowerSF, the City’s Community Choice Aggregation Program (“CCA Program”) in May 2016.

Today, CleanPowerSF is serving approximately 76,000 accounts with an annual energy requirement of approximately 535 gigawatt-hours (“GWh”). The program has maintained an opt-out rate of about 3.3%, and has attracted more than 1,800 pre-enrollments and 2,800 upgrades to CleanPowerSF’s 100% renewable *SuperGreen* product.

The SFPUC intends to complete citywide enrollment in the CleanPowerSF program by the summer of 2019. Upon full implementation, CleanPowerSF expects to serve approximately 360,000 retail accounts with total annual energy sales of approximately 3,600 GWh. To support citywide enrollment, CleanPowerSF issued a Renewable Energy Request for Offers (“RFO”) on June 22, 2017. The SFPUC anticipates entering into multiple short- and long-term renewable energy contracts as a result of the June 22<sup>nd</sup> solicitation.

As described more fully below, this RFO for Shaped Energy is intended to complement the Renewable Energy RFO by seeking bids for shaped energy, short-term renewable energy, environmental attributes and Resource Adequacy (“RA”) capacity. Specifically, the SFPUC seeks bids for energy products described in the Product Specifications sheet (Attachment A), consistent with the quantities, delivery periods, and renewable content quantities specified in the Bid Workbook (Attachment B) and that meet the following general criteria:

- Minimum annual energy delivery of 219,000 megawatt-hours (“MWh”) per year
- Initial delivery date ranging from May 2018 – April 2020
- Terms ranging from 1 year to a maximum of 3 years.

The City, acting by and through its Public Utilities Commission, CleanPowerSF, anticipates entering into contracts (Power Purchase Agreements or “PPAs”) with one or more winning Respondents through this RFO. The City’s payment obligations under the contract(s) executed through the RFO will be special limited obligations of the City payable solely from the revenues of CleanPowerSF.

The SFPUC expects to support CleanPowerSF’s financial obligations under the PPA’s awarded through this RFO with standby letters of credit from an investment-grade bank. The SFPUC will evaluate bids submitted hereunder on an all-in cost basis, considering the cost of credit support as well as the other bid parameters proposed by Respondents. For this reason, a Respondent proposing a lower requirement for credit support will be favored over a Respondent providing a higher requirement for credit support, all else equal.

## 1.1 The SFPUC

The SFPUC is a City department that provides drinking water to 2.5 million customers in the four (4) Bay Area counties of Alameda, Santa Clara, San Mateo and San Francisco; greenhouse gas (“GHG”)-free and renewable electricity in and around San Francisco, and; wastewater services within the City. Headquartered at 525 Golden Gate Avenue in San Francisco, the SFPUC has approximately 2,300 employees with a combined annual budget of approximately \$1 billion. The SFPUC’s mission

is to provide our customers with high quality, efficient and reliable water, power, and sewer services in a manner that is inclusive of environmental and community interests, and that sustains the resources entrusted to our care.

The SFPUC is comprised of three (3) separate enterprises. The SFPUC Water Enterprise is responsible for managing the transmission, treatment, storage and distribution of potable water to San Francisco's wholesale and retail customers, and the production of hydroelectric power. The SFPUC Wastewater Enterprise is responsible for managing the collection, treatment and disposal of San Francisco's wastewater. The SFPUC Power Enterprise (AA-/A+ long-term bond ratings from Fitch/Standard and Poor's) is responsible for managing retail power sales and service to both its CleanPowerSF and public utility customers, power transmission and scheduling, energy efficiency programs, street lighting services, utilities planning for redevelopment projects, energy resource planning efforts, and various other energy services.

The San Francisco Board of Supervisors adopted Ordinance 86-04 in 2004 authorizing the establishment of a CCA program in San Francisco. Pursuant to the San Francisco Charter, the SFPUC is responsible for the management of CleanPowerSF. As a division of the Power Enterprise, the CleanPowerSF program is under the direct administrative oversight of its Assistant General Manager, who in turn reports to the SFPUC General Manager. The program is funded by CleanPowerSF ratepayers. The goals of CleanPowerSF are to provide (1) affordable and reliable electricity services to San Francisco residents and businesses, (2) cleaner energy alternatives advancing the City's Greenhouse Gas reduction goals; (3) investment in local renewable energy projects and jobs; and (4) long-term rate and financial stability.

## **2. ATTACHMENTS**

The following attachments are included with this RFO:

- Attachment A: Product Specifications
- Attachment B: Bid Workbook (must be submitted with the bid)
- Attachment C: Form PPA
- Attachment D: Notice of Intent to Bid

Electronic versions of Attachments A, B, C, and D are available for download here:

<https://sfpuc.sharefile.com/d-s3788ca6cece48b58>

## **3. PRODUCTS SOUGHT**

The SFPUC is seeking proposals for the sale and purchase of the following energy supply products. Additional specifications regarding the terms for products sought are provided in Attachment A.

CleanPowerSF has provided the maximum energy quantities and indicative hourly load shapes in Attachment B – Bid Workbook. These volumes are indicative and will be refreshed. Respondents are

encouraged to bid all available volumes up to the specified maximum, as the SFPUC will consider bids of lesser volumes.

Respondents may bid on one or multiple products identified below and may submit more than one bid for a particular product. If necessary, Respondents may copy tabs of the bid workbook to submit multiple bids for a particular product.

### **3.1 Shaped Energy**

The SFPUC is seeking bids for electric energy delivered to the North-of-Path 15 (“NP 15”) trading hub [TH\_NP15\_GENAPND], as defined by the California Independent System Operator (“CAISO”), and shall be responsible for scheduling energy via inter-scheduling coordinator trades with CleanPowerSF’s designated scheduling coordinator.

The maximum energy quantities, indicative hourly load shapes, and contract delivery periods sought by CleanPowerSF are provided in Attachment B – Bid Workbook (Exhibit A-1, Shaped Energy). *Respondents may submit bids to supply the monthly energy quantities and the weekday and weekend shapes identified in the Bid Workbook. Respondents may also submit bids to supply conventional blocks of energy, such as around-the-clock (“ATC”) or 7x24, on peak (“On Peak”) or 6x16, or off peak (“Off Peak”) 7x8 products, in 25 MW increments, up to the total monthly quantities identified in Exhibit A-1. Please note specifics of blocks offered in Attachment B – Bid Workbook (Exhibit A-2 Block Energy).*

Respondents must describe whether they intend to source the requested energy supplies from: 1) generating units owned by the Respondent; 2) generating units controlled under contract (and identified as specified sources to CleanPowerSF); and/or 3) unspecified CAISO market purchases. Where possible, any specified generating sources to be used in fulfilling delivery of the proposed power supplies should be identified by the Respondent or be identified as “to be determined” in the Respondent’s bid materials.

### **3.2 Renewable Energy**

The SFPUC seeks bids for renewable energy from qualifying renewable resources (“Eligible Renewable Resources”) that meet the eligibility criteria established under California’s Renewable Portfolio Standard (“RPS”) program, consistent with Public Utilities Code Section 399.12 and Section 25741 of the California Public Resources Code.

The SFPUC seeks proposals that include renewable energy products meeting the delivery requirements established for Portfolio Content Category 1 (“PCC1”) and Portfolio Content Category 2 (“PCC 2”). PCC 2 energy must comply with the requirements set forth in California Public Utilities Commission Decision 11-12-020 and Incremental Energy deliveries shall not be sourced from coal or nuclear resources. The maximum annual volumes of PCC 1 and PCC 2 renewable energy sought by CleanPowerSF are provided in Attachment B. The SFPUC expects that all renewable energy certificates associated with the contracted renewable energy product volumes will be transferred by the proposer, in a timely manner, to CleanPowerSF via the Western Renewable Energy Generation Information System (“WREGIS”).



The SFPUC has a preference for renewable generating resources located within California and within the nine (9) San Francisco Bay Area Counties. California-based resources and resources located within the nine (9) San Francisco Bay Area Counties will receive higher evaluative preference when the SFPUC reviews responses to this RFO.

### **3.3 Carbon-Free Energy**

The SFPUC is also seeking bids for additional carbon free energy to supplement the aforementioned renewable energy volumes to meet the following annual portfolio carbon emissions targets, in pounds of carbon dioxide equivalents (lbs CO<sub>2</sub>e) per megawatt-hour:

2018: 200

2019: 185

2020: 170

2021: 155

For purposes of this solicitation, carbon free energy will be limited to unit-specific hydroelectric energy produced by California-based or regional generators located within the Western Electricity Coordinating Council and directly deliverable to the CAISO Balancing Authority Area. The SFPUC will require Respondents to provide documentation (e.g., meter reads, e-Tags) to substantiate the production and delivery of the carbon free energy to support the reporting of such volumes in CleanPowerSF's Power Source Disclosure Report, as required by the California Energy Commission.

Annual carbon free energy volumes are provided in Exhibit C of Attachment B. *Respondents may submit bids identifying specific volumes of additional carbon free energy to be provided, or may commit to energy volumes featuring mix of conventional and carbon-free resources that achieve the annual CO<sub>2</sub> emissions rates.* The emissions rate calculation is set forth in Exhibit B of Attachment C.

### **3.4 Resource Adequacy ("RA") Capacity**

The SFPUC seeks bids for Firm RA Capacity<sup>1</sup> satisfying applicable requirements for the following capacity products: System RA (NP 15); Local RA, and a sufficient quantity of Flexible RA (from qualified generating resources) located within NP 15. RA products are to be provided/scheduled over a minimum term of one (1) year commencing in May 2018. Local RA is to be provided/scheduled from resources located within the PG&E "Greater Bay Area" and the "Other PG&E" local capacity areas, as specified in Attachments A and B (Exhibit D – RA Capacity). Final RA volumes will be provided before bidders are required to submit their best and final offer.

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<sup>1</sup> The SFPUC is seeking RA bids for Firm RA Capacity, but is willing to consider bids for Contingent Firm RA Capacity.

## 4. RFO TIMELINE AND INSTRUCTIONS TO RESPONDENTS

### 4.1 RFO Timeline

Event	Date
RFO issued	September 8, 2017
Deadline to submit non-binding Notice of Intent to Bid Form (“NOI”)	September 13, 2017 at 5:00 PM
Deadline to submit questions	September 13, 2017 at 5:00 PM
Responses to questions provided	September 15, 2017
Deadline to submit bids	September 22, 2017 at 5:00 PM
Notification of shortlisted Bidders	September 27, 2017
PPA negotiations and contract approval	October –December 2017 (estimated)
Best and Final Offer and PPA execution	Starting in December 2017

### 4.2 Notice of Intent to Bid

By September 13, 2017 at 5:00 PM, Bidders are strongly encouraged to return a completed Notice of Intent to Bid (“NOI”), as found in Attachment E via email to [powerpurchasing@sfgwater.org](mailto:powerpurchasing@sfgwater.org). All NOI submissions should include the number and title of the RFO. Submission of a NOI is not a prerequisite to a bid submittal.

### 4.3 Bid Documents

The submission of a bid shall be deemed a representation and certification by the Respondent that:

- Respondent has read and understands the information provided by the SFPUC in this RFO and the information is the basis for the submission of Respondent’s bid;
- Respondent has the financial and technical capability to successfully undertake and complete the responsibilities and obligations described in the bid submitted by Respondent;
- The SFPUC has the right to make any inquiry of Respondent or any third party it deems appropriate to substantiate or supplement information supplied by Respondent, and Respondent hereby grants the SFPUC permission to make these inquiries, and Respondent agrees to provide any and all requested documentation or information in a timely manner.

No request for modification of any bid shall be considered by the SFPUC after the submission of a bid on the grounds that the Respondent was not fully informed of any fact or condition stated in this RFO.

### 4.4 Addenda/Clarifications

Respondents are responsible for reviewing all portions of this RFO. Respondents are to promptly notify the SFPUC, in writing, if the Respondent discovers any ambiguity, discrepancy, omission, or

other error in the RFO. Any such notification should be directed to the SFPUC promptly after discovery, but in no event later than five working days prior to the date for receipt of bids. Modifications and clarifications will be made by addenda as provided below.

Any interpretation of, or change in, the RFO will be made by addendum and shall become a part of the RFO and of any Agreement awarded. Addenda will be distributed and posted on the CleanPowerSF Energy Procurement website (<https://sfwater.org/index.aspx?page=1174>).

The SFPUC will make reasonable efforts to distribute and post in a timely manner any modifications to the RFO on the [CleanPowerSF Energy Procurement website](https://sfwater.org/index.aspx?page=1174) (<https://sfwater.org/index.aspx?page=1174>). The Respondent shall be responsible for ensuring that its bid reflects any and all addenda posted by the SFPUC prior to the bid due date regardless of when the bid is submitted. The SFPUC will not be responsible for any other explanation or interpretation.

#### **4.5 Bid Submissions**

Respondents must deliver their RFO response via email to [powerpurchasing@sfwater.org](mailto:powerpurchasing@sfwater.org) by the deadline listed above. The subject line of the email shall be: "CleanPowerSF Shaped Energy RFO Response." Proposals must provide all of the information requested in this RFO in a summary document, not to exceed 10 pages. In addition, each proposal must include a cover letter signed by an individual authorized to obligate the Respondent to fulfill the commitments contained in the proposal. The letter must include the following: (1) a statement identifying the Lead Respondent if a JV is responding to this RFO; (2) a contact for all communications pertaining to the Respondent's proposal (include telephone number, fax number, e-mail address and mailing address); (3) a statement of the Proposer's overall ability and qualifications to conduct the work described in this RFO; and (4) a statement that the proposal meets the Bid Requirements set forth in Section 5.

Attachment B to this RFO must be completed and attached as an Excel spreadsheet format with the bid in order for the bid to be considered.

Bids must be submitted no later than 5:00 p.m. on Friday, September 22, 2017. Respondents whose bids are selected for the RFO shortlist may be invited to submit optional supplemental materials.

For technical or procedural questions regarding the online submittal, please contact [powerpurchasing@sfwater.org](mailto:powerpurchasing@sfwater.org).

#### **4.6 Amendment or Withdrawal of Bids**

A Respondent may amend or withdraw its bid at any time before the expiration of the time for the submission of bids by (1) delivering a redlined version of the bid submittal in the same manner as specified for the original bid submittal, or (2) delivery of a written request for withdrawal, signed by, or on the behalf of, the Respondent.

#### **4.7 Rights of the SFPUC**

This RFO does not commit the SFPUC to enter into a contract with any Respondent nor does it obligate the SFPUC to pay for any costs incurred in preparation and submission of bids or in anticipation and execution of a contract. The SFPUC reserves the right to:

- Make the selection of bids based on its sole discretion;
- Reject any and all bids;
- Request any and all Respondents to provide additional information under this RFO;
- Prior to the submission deadline for bids, modify all or any portion of the selection procedures, including deadlines for accepting responses, the specifications or requirements for any supplies to be provided under this RFO, or the requirements for contents or format of the bids;
- In its sole discretion and without notice, suspend, or terminate this RFO without liability to any Respondent;
- Issue subsequent Requests for Offers or Proposals;
- Remedy technical errors in the RFO process or documents;
- Approve or disapprove the use of particular subcontractors;
- Negotiate with any or all of the Respondents;
- Accept a bid or bids that are not the lowest price offer;
- Waive informalities and irregularities in the bids; and/or
- Enter into a contract with another Respondent in the event the originally selected Respondent(s) defaults or fails to execute a contract with the SFPUC.

This RFO does not constitute an offer to buy or create an obligation for the SFPUC, CleanPowerSF, and/or City to enter into an agreement with any entity, and the SFPUC, CleanPowerSF, and City shall not be bound by the terms of any bid until the parties have entered into a fully executed agreement.

Failure by the SFPUC to object to an error, omission, or deviation in the bid will in no way modify the RFO or excuse the Respondent from full compliance with the specifications of the RFO or any contract awarded pursuant to this RFO. No waiver by the City of any provision of this RFO shall be implied from any failure by the City to recognize or take action in response to a failure by a Respondent to observe any provision of this RFO. No Respondent responding to this RFO shall obtain any claim or right of action against the SFPUC by reason of any aspect of the RFO, and defects or abnormalities contained herein, and defects or abnormalities in the selection process, the rejection of any bid, the acceptance of any bid, any statements, representation, acts or omissions of the SFPUC, the exercise of any SFPUC discretion set forth in or with respect to any of the foregoing, and any and all other matters arising out of all or any of the foregoing.

## **5. BID REQUIREMENTS**

This section sets forth the guidelines for the content and format of bids. Each Respondent shall submit their proposal with a Proposal Narrative, not to exceed 10 pages, a Bid Workbook, and any other supplemental information requested. Respondents may submit one or more bids in response to this RFO using the Bid Workbook. Respondents should review the instructions provided in the Bid Workbook (Attachment B) for additional information regarding the organization and submittal

of bids. The SFPUC anticipates entering into contracts with one or more winning Respondents through this RFO.

## 5.1 Proposal Narrative

The City is seeking bids from entities sufficiently qualified, experienced and capable of providing the desired energy products. The following is a list of the City's minimum requirements for the Proposal Narrative.

- A description of the proposed products offered.
- A description of the Respondent, its organization, key personnel, and operations, and provide similar information for any third parties that would be relied upon to provide the proposed services. If the Respondent is a Joint Venture ("JV"), include a description of the organization, relationships, and defined responsibilities of all Partners in the JV and any previous project-specific associations of the JV Partners.
- A description of Respondent's overall ability and qualifications to deliver the energy products described in the bid, including descriptions of power purchase agreements which are generally similar to those addressed in the Respondent's bid.
- A demonstration of the Respondent's financial viability by providing access to the following documentation:
  - Audited financial statements from the previous two years and a recent quarterly financial report (or a web link where such information is accessible).
  - If available, the credit rating history of the Respondent (or its guarantor) for the previous two years from two of the following: Standard & Poor's, Moody's, or Fitch Investor Services.
  - If the Respondent's (or its guarantor's) credit rating is below investment grade (below BBB-/Baa3), or falls below investment grade during the contract term, confirmation that the Respondent will provide equivalent credit support for the duration of the contract through cash collateral, a letter of credit, a first or second lien on the generating facilit(ies) or an alternative equivalent credit mechanism.
- A description of the assumptions for credit support that underlie Respondent's proposal. This description should summarize Sellers expectations/requirements for Buyer's collateral posting. For example, Respondent should state whether the collateral posting is expected to cover the entire monthly payment or only the termination payment amount, and whether the collateral posting requirement will be capped at a fixed amount. This description will be used to estimate the SFPUC's cost of credit support for each Respondent's proposal.

## 5.2 Bid Criteria

The following bid criteria apply:

- All energy bids must be submitted for firmed and shaped product.
- The selected Respondent(s) will be responsible for transferring the specified energy quantities to CleanPowerSF at the designated delivery point through the CAISO inter-scheduling coordinator trading process. Respondents shall serve as their own SC or make arrangements for a third party SC at no cost to CleanPowerSF.
- Deliveries shall be equivalent to 100% of the volumes specified by the Respondent in its Bid Workbook (Attachment B) and may be from multiple generating facilities so long as each facility meets the qualifying criteria set forth in this RFO. Bids shall provide fixed hourly quantities delivered in the form of hourly shapes identified in Exhibit A-1 or standard blocks of energy (e.g., 7x24, 7x8, 6x16) to be specified by the Respondent in Exhibit A-2.
- *Energy deliveries shall NOT be shaped or firmed with coal or nuclear resources.*
- All renewable energy deliveries must meet the eligibility criteria for either PCC 1 or PCC 2. *Incremental Energy associated with PCC 2 deliveries shall not be sourced from coal or nuclear resources.*
- Product pricing:
  - For Shaped Energy, bids are to be provided as a fixed \$/MWh price for each calendar year (or portion thereof) of the proposed contract term for delivery to the generator node; and NP 15 trading hub, defined as TH\_NP15\_GENAPND by the CAISO.
  - For Renewable Energy, bids are to be provided as a fixed \$/MWh price premium (expressed as an adder on top of the shaped energy price) for each calendar year (or portion thereof) of the proposed contract term.
  - For Carbon Free Energy, bids are to be provided as a fixed \$/MWh price premium (expressed as an adder on top of the shaped energy price) for each calendar year (or portion thereof) of the proposed contract term.
  - For RA capacity, bids are to be provided as a fixed \$/kW-month price for each calendar year (or portion thereof) of the proposed contract term.
- Each pricing option shall remain unchanged throughout the entire contract term and shall not be adjusted by periodic escalators or time of delivery multipliers/factors.
  - The SFPUC is seeking bids for Firm RA Capacity, but will consider bids for Contingent Firm RA Capacity
- Contract term shall be no more than three (3) years (not including optional extension terms).
- A delivery commencement date no sooner than May 1, 2018 and no later than April 30, 2020.
- A minimum hourly quantity of no less than 1 MW.
- Total annual deliveries shall be at least 219,000 MWh and no more than the annual quantities identified in Attachment B, Exhibit A-1.

### 5.3 Green-e Energy Eligibility

CleanPowerSF has a preference for renewable generating resources that are Green-e Energy eligible to meet its needs for customers that choose CleanPowerSF's Premium Product. Respondents should review the currently effective Green-e Energy National Standard for information regarding the eligibility criteria for such resources and indicate in their bid if they intend to deliver renewable energy meeting the Green-E Energy standard for all or part of the volume offered.

A copy of the Green-e Energy National Standard as well as additional information regarding the Green-e Energy program can be accessed via the following web link:

[http://www.green-e.org/getcert\\_re\\_stan.shtml#standard](http://www.green-e.org/getcert_re_stan.shtml#standard).

## 6. CONTRACT FORM

The SFPUC intends to execute power purchase agreements with one or more selected respondents using the SFPUC's Form PPA included as Attachment C. However, the Form PPA will be amended as necessary to reflect the elements of the selected bids, for example, additional language for PPC 2 energy deliveries, or optional bid components. The SFPUC may elect to use a Western System Power Pool ("WSPP") Confirmation for shorter term contracts. The PPA may be subject to review and approval by the San Francisco Public Utilities Commission and the Board of Supervisors.

## 7. SELECTION CRITERIA

The SFPUC will evaluate the bids provided in response to this RFO to establish a balanced, viable portfolio of supply for the CleanPowerSF program. Development of the portfolio will consider the following criteria:

- *Qualifications and Experience of the Respondent.* The experience and track record of the Respondent and key personnel; financial strength and viability of Respondent and if applicable, its partners; credit support to be provided, if credit rating is below investment grade; years of experience; and volume of energy supplied in the most recent calendar year (e.g., 2016).
- *Total Cost of Bid and Value to CleanPowerSF.* The impact of the proposed pricing in relation to the target CleanPowerSF rates (i.e., providing lowest total costs); contribution to CleanPowerSF price stability and competitiveness; and the impact of the bid on CleanPowerSF's residual market exposure, financial risk and collateral requirements.
- *Bid Compatibility with CleanPowerSF's Portfolio Requirements.* The SFPUC's evaluation will consider the compatibility of a bid's proposed monthly energy deliveries, environmental attributes and RA Capacity quantities and attributes with CleanPowerSF's near-term needs.
- *Generating Resource Location.* The SFPUC will also consider the location of proposed generating resources. California-based renewable and carbon-free resources and renewable resources located within the nine (9) San Francisco Bay Area Counties are preferred.

The SFPUC reserves the right to consider other factors than those specified above and to request additional information from Respondents as needed to assist in selecting the proposal(s) for further consideration.

The SFPUC does not anticipate conducting oral interviews for this RFO. However, the SFPUC reserves the right to contact any Respondent for additional information or clarification of the terms of the bid.

## **8. PROTEST PROCEDURES**

### **8.1 Protest of Non-Responsiveness Determination**

After receipt of proposals, the SFPUC will conduct an Initial Screening of submitted proposals as set forth in Section 5 of this RFO. If staff determines that a proposal should be rejected because it is either non-responsive to RFO requirements or is otherwise unacceptable (i.e., fails to meet the minimum qualification requirements set forth in the RFO), then the City will issue a Preliminary Notice of Proposal Rejection to the applicable Respondent(s).

If a Respondent believes that the City has incorrectly determined that its proposal should be rejected, Respondent may submit a written notice of protest within five (5) working days of the SFPUC's issuance of a Preliminary Notice of Proposal Rejection. Such notice of protest must be received by the SFPUC on or before the fifth (5th) working day following the SFPUC's issuance of the Preliminary Notice of Proposal Rejection. The notice of protest must include a written statement specifying in detail each and every one of the grounds asserted for the protest. The protest must be signed by an individual authorized to represent the Respondent, and must cite the law, rule, local ordinance, procedure or RFO provision on which the protest is based. In addition, the Respondent must specify facts and evidence sufficient for the SFPUC to determine the validity of the protest. The City, at its discretion, may make a determination regarding a protest without requesting further documents or information from the Respondent who submitted the protest. Accordingly, the initial protest must include all grounds of protest and all supporting documentation or evidence reasonably available to the prospective Respondent at the time the protest is submitted. If the Respondent later raises new grounds or evidence that were not included in the initial protest, but which could have been raised at that time, then the City may not consider such new grounds or new evidence.

Upon receipt of a timely and proper protest, the City will review the protest and conduct an investigation as it deems appropriate. As part of its investigation, the City may consider information provided by sources other than Respondent. The City may also consider supplemental correspondence or other information relating to the original ground(s) of Protest submitted by a protesting Respondent to the extent the City determines that such information will assist it in resolving the Protest. At the completion of its investigation, the City will provide a written determination to the Respondent who submitted the protest.

Protests not received within the time and manner specified will not be considered.

If a Respondent does not protest a Preliminary Notice of Proposal Rejection within the time and in the manner specified, above, then the City's determination set forth in the Preliminary Notice will



become final. A Respondent's failure to protest as specified above on or before the time specified above shall constitute a complete and irrevocable waiver of the ground(s) of protest and forfeit the Respondent's right to raise such ground(s) of protest later in the procurement process, in a Government Code Claim, or in other legal proceedings.

## **8.2 Protest of Agreement Award**

As soon as the PPAs with the selected Respondent(s) are finalized, the SFPUC will post notice of the award on the CleanPowerSF Energy Procurement website (<https://sfwater.org/index.aspx?page=1174>). Within five (5) working days of the posting of the notice, any Respondent that has submitted a responsive proposal and believes that the City has unfairly selected another Respondent may submit a written notice of protest.

The notice of protest must include a written statement specifying in detail each and every one of the grounds asserted for the protest. The protest must be signed by an individual authorized to represent the Respondent, and must cite the law, rule, local ordinance, procedure or RFO provision on which the protest is based. In addition, the Respondent must specify facts and evidence sufficient for the City to determine the validity of the protest. All protests must be received by the SFPUC on or before the fifth (5th) working day following the SFPUC's posting of the notice of award.

## **8.3 Delivery of Protests**

If a protest is mailed, the protestor bears the risk of non-delivery within the deadlines specified herein. Protests should be transmitted by a means that will objectively establish the date the City received the protest. Protests or notice of protests made orally (e.g., by telephone) will not be considered. Protests must be delivered to:

San Francisco Public Utilities Commission  
Contract Administration Bureau  
RE: CleanPowerSF Shaped Energy RFO (PRO.0089)  
525 Golden Gate Avenue, 8th Floor  
San Francisco, CA 94102

# **9. ADDITIONAL SFPUC REQUIREMENTS**

## **9.1 Respondent Proprietary Information**

In accordance with San Francisco Administrative Code Section 67.24(e), bids, responses to RFOs and all other records of communications between the City and persons or firms seeking contracts shall be open to inspection immediately after a contract has been awarded. Nothing in this provision requires the disclosure of a private person's or entity's net worth or other proprietary financial data submitted for qualification for a contract or other benefits until and unless that person or organization is awarded the contract or benefit. Information provided which is covered by this paragraph will be made available to the public upon request.

Proprietary data shall be specifically identified on every applicable page of the Respondent's proposal; Respondents should mark or stamp applicable sections and information as "Confidential" or "Proprietary". The City does not acknowledge, warrant, represent, or guarantee that any

information so designated will be treated as confidential or proprietary information if disclosure is required under any applicable state, federal, or City law or regulation.

## **9.2 The Campaign Reform Ordinance**

Respondents must comply with Section 1.126 of the San Francisco Campaign and Governmental Code, which states:

No person who contracts with the City and County of San Francisco for the rendition of personal services, for the furnishing of any material, supplies or equipment to the City, or for selling any land or building to the City, whenever such transaction would require approval by a City elective officer, or the board on which that City elective officer serves, shall make any contribution to such an officer, or candidates for such an office, or committee controlled by such officer or candidate at any time between commencement of negotiations for such contract until (1) the termination of negotiations for such contract; or (2) three months have elapsed from the date the contract is approved by the City elective officer, or the board on which that City elective officer serves.

If a Respondent is negotiating for a contract that must be approved by an elected local officer or the board on which that officer serves, during the negotiation period the Respondent is prohibited from making contributions to:

- The officer's re-election campaign;
- A candidate for that officer's office; and
- A committee controlled by the officer or candidate.

The negotiation period begins with the first point of contact, either by telephone, in person, or in writing, when a Respondent approaches any city officer or employee about a particular contract, or a city officer or employee initiates communication with a potential Respondent about a contract. The negotiation period ends when a contract is awarded or not awarded to the Respondent. Examples of initial contacts include: (i) a vendor contacts a city officer or employee to promote himself or herself as a candidate for a contract; and (ii) a city officer or employee contacts a Respondent to propose that the Respondent relating to a RFO, and requests to be placed on a mailing list do not constitute negotiations. Violation of Section 1.126 may result in the following criminal, civil, or administrative penalties:

1. Criminal: Any person who knowingly or willfully violates Section 1.126 is subject to a fine of up to \$5,000 and a jail term of not more than six months, or both.
2. Civil: Any person who intentionally or negligently violates Section 1.126 may be held liable in a civil action brought by the civil prosecutor for an amount up to \$5,000.
3. Administrative: Any person who intentionally or negligently violates section 1.126 may be held liable in an administrative proceeding before the Ethics Commission held pursuant to the Charter for an amount up to \$5,000 for each violation.

## 10. DEFINITIONS

“Applicable Law” means any statute, law, treaty, rule, tariff, regulation, ordinance, code, permit, enactment, injunction, order, writ, decision, authorization, judgment, decree or other legal or regulatory determination or restriction by a court or Governmental Authority of competent jurisdiction, or any binding interpretation of the foregoing, as any of them is amended or supplemented from time to time, that apply to either or both of the Parties or the terms of the Agreement.

“ATC” means around-the-clock from hour ending 0100 through hour ending 2400 Monday through Sunday, or 7x24.

“Buyer” means City and County of San Francisco, acting by and through its Public Utilities Commission, CleanPowerSF.

“CAISO” means the California Independent System Operator Corporation or the successor organization to the functions thereof.

“CAISO Tariff” means the California Independent System Operator Corporation, Fifth Replacement Federal ERC Electric Tariff as it may be amended, supplemented or replaced (in whole or in part) from time to time.

“CEC” means the California Energy Commission.

“City” means the City and County of San Francisco.

“CleanPowerSF” means the community choice aggregation program operated by City.

“CPUC” means the California Public Utilities Commission.

“ERR” shall mean an Eligible Renewable Energy Resource as such term is defined in Public Utilities Code Section 399.12 or Section 399.16.

“Green Attributes” means any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the generation from a Project, and its avoided emission of pollutants. Green Attributes include but are not limited to Renewable Energy Credits, as well as: (1) any avoided emission of pollutants to the air, soil or water such as sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO) and other pollutants; (2) any avoided emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change, or otherwise by law, to contribute to the actual or potential threat of altering the Earth’s climate by trapping heat in the atmosphere; (3) the reporting rights to these avoided emissions, such as Green Tag Reporting Rights. Green Tag Reporting Rights are the right of a Green Tag Purchaser to report the ownership of accumulated Green Tags in compliance with federal or state law, if applicable, and to a federal or state agency or any other party at the Green Tag Purchaser’s discretion, and include without limitation those Green Tag Reporting Rights accruing under Section 1605(b) of The Energy Policy Act of 1992 and any present or future federal, state, or local law, regulation or bill, and international or foreign emissions trading program. Green Tags are accumulated on a MWh basis and one Green Tag represents the Green Attributes associated with one (1) MWh of Energy. Green Attributes do not include (i) any energy, capacity, reliability or other power attributes from a project, (ii) production tax credits associated

with the construction or operation of a project and other financial incentives in the form of credits, reductions, or allowances associated with the project that are applicable to a state or federal income taxation obligation, (iii) fuel-related subsidies or “tipping fees” that may be paid to Seller to accept certain fuels, or local subsidies received by the generator for the destruction of particular preexisting pollutants or the promotion of local environmental benefits, or (iv) emission reduction credits encumbered or used by a project for compliance with local, state, or federal operating and/or air quality permits. If a Project is a biomass or biogas facility and Seller receives any tradable Green Attributes based on the greenhouse gas reduction benefits or other emission offsets attributed to its fuel usage, it shall provide Buyer with sufficient Green Attributes to ensure that there are zero net emissions associated with the production of electricity from the Project.

“GWh” means gigawatt-hour.

“Inter-Scheduling Coordinator” or “Inter-SC Trades” has the meaning set forth in the CAISO Tariff.

“MW” means megawatt.

“MWh” means megawatt-hour.

“Off Peak” means between hour ending 0100 through hour ending 0600, and hour ending 2300 through hour ending 2400 Monday through Sunday, or 7x8.

“On Peak” means between hour ending 0700 through hour ending 2200 Monday through Saturday, excluding NERC holidays, or 6x16.

“Partial Capacity Deliverability Status” or “PCDS” has the meaning set forth in the CAISO Tariff.

“Portfolio Content Category 1” or “PCC 1” means Renewable Energy that satisfies the requirements of Section 399.16(b)(1) of the California Public Utilities Code.

“Portfolio Content Category 2” or “PCC 2” means Renewable Energy that satisfies the requirements of Section 399.16(b)(1) of the California Public Utilities Code.

“PPA” means Power Purchase Agreement.

“Renewable Energy” means Energy and Green Attributes generated from an ERR that: (1) meets the requirements of Portfolio Content Category 1 or 2 as set forth in the California Public Utilities Code Section 399.16(b)(1), and (2) is generated in the same calendar year that it is delivered to City.

“Renewable Energy Certificates” or “RECs” has the meaning set forth in California Public Utilities Code Section 399.12(f) and CPUC decision 08-08-028 as may be amended from time to time or as further defined or supplemented by Applicable Law.

“Renewables Portfolio Standard” or “RPS” means the California renewables portfolio standard, as set forth in California Public Utilities Code §§ 399.11 et seq. and California Public Resources Code §§ 25740-25751, and as administered by the CEC as set forth in the CEC RPS Eligibility Guidebook (7th Ed.), as may be subsequently modified by the CEC, and the California Public Utilities Commission (“CPUC”) and as may be modified by subsequent decision of the CPUC or by subsequent legislation, and regulations promulgated with respect thereto.

“Resource Adequacy” or “RA” means the local and system resource adequacy capacity requirements established for load serving entities by the CPUC pursuant to the CPUC Decisions, the flexible

capacity standards under the CAISO Tariff or by any other Governmental Authority having jurisdiction.

**“Scheduling Coordinator” or “SC”** means an entity certified by the CAISO as qualifying as a Scheduling Coordinator pursuant to the CAISO Tariff for the purposes of undertaking the functions specified in “Responsibilities of a Scheduling Coordinator” as set forth in the CAISO Tariff.

**“Seller” or “Supplier”** means the owner and operator of a power generating facility who will sell the product of the facility to the Buyer.

**“WECC”** means the Western Electricity Coordinating Council.

**“WREGIS”** means the Western Renewable Energy Generation Information System or any successor renewable energy tracking program.

**“WSPP Confirmation”** means Western System Power Pool Confirmation.

# **Request for Offers:**

**2017 Renewable Energy Supplies**

**Agreement No. PUC.PRO.0077**

**6/22/2017**



**San Francisco**  
**Water Power Sewer**

Services of the San Francisco Public Utilities Commission

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# 1. INTRODUCTION AND BACKGROUND

The City and County of San Francisco (“City”), acting by and through its Public Utilities Commission, Power Enterprise (SFPUC), launched the first phase of CleanPowerSF, the City’s Community Choice Aggregation Program (CCA Program) in May 2016.

Today, CleanPowerSF is serving approximately 76,000 accounts with an annual energy requirement of approximately 535 gigawatt-hours (GWh). The program has maintained an opt-out rate of about 3.3%, and has attracted more than 1,700 pre-enrollments and 2,350 upgrades to CleanPowerSF’s 100% renewable *SuperGreen* product.

The SFPUC intends to complete citywide enrollment in the CleanPowerSF program by the summer of 2019. Upon full implementation, CleanPowerSF expects to serve approximately 360,000 retail accounts with total annual energy sales of approximately 3,600 GWh.

As described more fully below, this Request for Offers (RFO) for Renewable Energy seeks energy (and Resource Adequacy capacity, if available) from new and existing Eligible Renewable Energy Resources (“ERRs”), as defined in California Public Utilities Code Section 399.12 and California Public Resources Code Section 25741. The SFPUC seeks bids for energy, environmental attributes, and capacity that meet the following criteria:

- New or existing ERRs;
- Minimum annual energy delivery of 25,000 megawatt-hours (MWh) per year and a maximum of 500,000 MWh per year
- Initial delivery date ranging from May 2018 – December 2021
- Terms ranging from 1 year to a maximum of 25 years.

The City, acting by and through its Public Utilities Commission, CleanPowerSF, anticipates entering into contracts (Power Purchase Agreements or “PPAs”) with one or more winning Respondents through this RFO. The City’s payment obligations under the contract(s) executed through the RFO will be special limited obligations of the City payable solely from the revenues of CleanPowerSF.

## 1.1 The SFPUC

The SFPUC is a City department that provides drinking water to 2.5 million customers in the four (4) Bay Area counties of Alameda, Santa Clara, San Mateo and San Francisco; greenhouse gas (GHG)-free and renewable electricity in and around San Francisco, and; wastewater services within the City. Headquartered at 525 Golden Gate Avenue in San Francisco, the SFPUC has approximately 2,300 employees with a combined annual budget of approximately \$1 billion. The SFPUC’s mission is to provide our customers with high quality, efficient and reliable water, power, and sewer services in a manner that is inclusive of environmental and community interests, and that sustains the resources entrusted to our care.

The SFPUC is comprised of three (3) separate enterprises. The SFPUC Water Enterprise is responsible for managing the transmission, treatment, storage and distribution of potable water to San Francisco’s wholesale and retail customers, and the production of hydroelectric power. The SFPUC Wastewater Enterprise is responsible for managing the collection, treatment and disposal of



San Francisco’s wastewater. The SFPUC Power Enterprise (AA-/A+ long-term bond ratings from Fitch/Standard and Poor’s) is responsible for managing retail power sales and service to both its CleanPowerSF and public utility customers, power transmission and scheduling, energy efficiency programs, street lighting services, utilities planning for redevelopment projects, energy resource planning efforts, and various other energy services.

The San Francisco Board of Supervisors adopted Ordinance 86-04 in 2004 authorizing the establishment of a CCA program in San Francisco. Pursuant to the San Francisco Charter, the SFPUC is responsible for the management of CleanPowerSF. As a division of the Power Enterprise, the CleanPowerSF program is under the direct administrative oversight of its Assistant General Manager, who in turn reports to the SFPUC General Manager. The program is funded by CleanPowerSF ratepayers. The goals of CleanPowerSF are to provide (1) affordable and reliable electricity services to San Francisco residents and businesses, (2) cleaner energy alternatives advancing the City’s Greenhouse Gas reduction goals; (3) investment in local renewable energy projects and jobs; and (4) long-term rate and financial stability.

## 2. ATTACHMENTS

The following attachments are included with this RFO:

- Attachment A: Notice of Intent to Bid
- Attachment B: Product Specifications
- Attachment C: Bid Workbook (must be submitted with the bid)
- Attachment D: Summary of PPA Terms and Conditions
- Attachment E: Form PPAs (New ERRs; Existing ERRs)
- Attachment F: Community Benefits
- Attachment G: Generation Profile Template

Electronic versions of Attachments A, B, C, D, E, F, and G are available on SFBid (<https://sfbid.sfwater.org/>)

## 3. PRODUCTS SOUGHT

CleanPowerSF is seeking proposals for the sale and purchase of renewable energy per the following terms:

Requirement	Specifications
Resource Eligibility	All eligible renewable resources must be California Renewable Portfolio Standard (“RPS”) certified, consistent with Public Utilities Code Section 399.12 and Section 25741 of the California Public Resources Code.

Project Location	Preference will be given to bids featuring energy from projects located within California and within the nine (9) Bay Area Counties, equivalent to 5% of bid score.
Delivery Point	Respondent shall be financially and operationally responsible for delivery of all electric energy to the delivery point(s), as further described below. Respondent shall serve as its own scheduling coordinator ("SC") or make arrangements for a third party scheduling coordinator at no cost to SFPUC.
Renewable Energy Product Types	<p>Bids featuring energy from New ERRs must satisfy applicable Product Content Category ("PCC") 1 delivery requirements for all energy volumes.</p> <p>Bids featuring energy from Existing ERRs must satisfy applicable PCC 1 or PCC 2 delivery requirements for all energy volumes.</p> <p>PCC 2 energy must comply with the requirements set forth in California Public Utilities Commission Decision 11-12-020 and <u><i>Incremental Energy deliveries shall not be sourced from coal or nuclear resources.</i></u></p> <p>See requested renewable energy volumes for Product identified in the attached Bid Workbook (Attachment C).</p>
Capacity	SFPUC will consider proposals from projects offering Energy Only or Resource Adequacy capacity attributes.
Term of Agreement	One (1) to twenty-five (25) years
Delivery Start Date	Proposals must have a delivery start date that is no earlier than May 1, 2018 and no later than December 31, 2021.
Minimum and Maximum Energy Deliveries	Annual energy deliveries shall be no less than 25,000 MWh per year and no more than 500,000 MWh per year

<p>Firmness</p>	<p>The PCC 1 or PCC 2 energy supply may be offered as either:</p> <p><b>Firmed and Shaped Renewable Energy</b> – Firmed and shaped renewable energy (and capacity, if applicable) supplied by the Respondent to the SFPUC at the delivery point. Deliveries shall NOT be firmed and shaped from coal or nuclear resources. Deliveries shall be equivalent to 100% of the volumes specified by the Respondent in its Bid Workbook (Attachment C). Bids shall provide fixed hourly quantities delivered in the form of standard blocks of energy (e.g., 24x7, 6x16) or alternative fixed hourly quantities (e.g., fixed hourly quantities which align more closely with the Respondent’s expected production renewable energy profile) as specified by Respondent in its Bid Workbook.</p> <p>OR</p> <p><b>Unit Contingent, As-Available Renewable Energy</b> – Renewable energy (and capacity, if applicable) supplied by the Respondent to the SFPUC at the delivery point in hourly amounts equal to all or a specified fraction of the facility’s actual energy production. The proposed hourly production forecast and expected total annual deliveries shall be identified in the attached Bid Workbook (Attachment C).</p>
<p>Scheduling</p>	<p>It is the SFPUC’s intent that the scheduling of product deliveries shall be accomplished according to industry practices applied in the Western Electricity Coordinating Council (“WECC”) region. Each Respondent shall be responsible for the scheduling the product as a California Independent System Operating (“CAISO”) Inter-SC trade to match SFPUC’s Inter-SC trade. It will be the Seller’s obligation to deliver all energy quantities identified in the firm schedules from the specified resource(s) to the delivery point. Seller will manage the market exposure and related costs for any energy imbalances as well as any alternative transmission path(s) that may be required to deliver the product to Buyer at the delivery point.</p>
<p>Proposed Pricing</p>	<p>Each PCC 1 product bid must, at a minimum, include the following two pricing alternatives:</p> <ol style="list-style-type: none"> <li>1. A fixed \$/MWh price, for each year of the proposed contract term, for delivery to the generator node;</li> </ol> <p>AND</p> <ol style="list-style-type: none"> <li>2. A fixed \$/MWh price, for each year of the proposed contract term, for delivery to the NP15 trading hub, as defined by the CAISO [TH_NP15_GENAPND].</li> </ol> <p>Responses may also include pricing for the addition of co-located storage as well as pricing at other Delivery Points for the SFPUC’s consideration (in its discretion).</p> <p>Each PCC 2 product bid shall be priced at a fixed \$/MWh price,</p>

	<p>for each year of the proposed contract term, for delivery to the NP15 trading hub [TH_NP15_GENAPND].</p> <p>As specified, each pricing option shall remain unchanged throughout the entire contract term and shall not be adjusted by periodic escalators or time of delivery multipliers/factors. Proposed prices shall also be inclusive of the capacity (resource adequacy) benefit, if applicable.</p>
Green-e Energy Eligibility	<p>CleanPowerSF has a preference for renewable generating resources that are Green-e Energy eligible.</p> <p>New projects must be Green-e Energy eligible resources.</p> <p>A copy of the Green-e Energy National Standard as well as additional information regarding the Green-e Energy program can be accessed via the following web link: <a href="http://www.green-e.org/getcert_restan.shtml#standard">http://www.green-e.org/getcert_restan.shtml#standard</a>.</p>

## 4. RFO TIMELINE AND INSTRUCTIONS TO RESPONDENTS

### 4.1 RFO Timeline

Event	Date
RFO issued	June 22, 2017
Pre-Bid Conference Call	June 29, 2017 at 11:00 AM
Deadline to submit non-binding Notice of Intent to Bid Form ("NOI")	June 29, 2017 at 5:00 PM
Deadline to submit questions	July 3, 2017 at 5:00 PM
Responses to questions provided	July 7, 2017
Deadline to submit bids	July 19, 2017 at 5:00 PM
Notification of shortlisted Bidders	August 21, 2017
PPA negotiations and contract approval	August – November 2017 (estimated)
PPA execution	Starting in December 2017

### 4.2 Notice of Intent to Bid

By June 29, 2017 at 5:00 PM, Bidders are encouraged to return a completed Notice of Intent to Bid ("NOI"), as found in Exhibit A via email to [RFP@sfwater.org](mailto:RFP@sfwater.org). All NOI submissions should include the number and title of the RFO. The NOI is non-binding and all Bidders will be invited to the Pre-Bid Conference Call.

### **4.3 Pre-Bid Conference Call**

A pre-bid conference call will be held on June 29, 2017 at 11:00 AM. Questions regarding the RFO will be addressed on this conference call and any new information will be provided at that time. While SFPUC staff may provide oral clarifications, explanations, or responses to any inquiries, the SFPUC is not bound by any oral representation. If any new and/or substantive information is provided in response to questions raised on the pre-bid conference call, such information will be memorialized in a written addendum to this RFO.

All requests for information concerning the RFO, whether submitted before or after the pre-submittal conference, must be in writing and submitted via the SFBid website (<https://sfbid.sfwater.org/>). Substantive replies will be memorialized in written addenda to be made part of this RFO. All addenda will be posted on the SFBid website. No questions or requests for interpretation will be accepted after July 3, 2017 at 5:00 PM.

### **4.4 Bid Documents**

The submission of a bid shall be deemed a representation and certification by the Respondent that:

- Respondent has read and understands the information provided by the SFPUC in this RFO and the information is the basis for the submission of Respondent's bid;
- Respondent has the financial and technical capability to successfully undertake and complete the responsibilities and obligations described in the bid submitted by Respondent;
- The SFPUC has the right to make any inquiry of Respondent or any third party it deems appropriate to substantiate or supplement information supplied by Respondent, and Respondent hereby grants the SFPUC permission to make these inquiries, and Respondent agrees to provide any and all requested documentation or information in a timely manner.

No request for modification of any bid shall be considered by the SFPUC after the submission of a bid on the grounds that the Respondent was not fully informed of any fact or condition stated in this RFO.

### **4.5 Addenda/Clarifications**

Respondents are responsible for reviewing all portions of this RFO. Respondents are to promptly notify the SFPUC, in writing, if the Respondent discovers any ambiguity, discrepancy, omission, or other error in the RFO. Any such notification should be directed to the SFPUC promptly after discovery, but in no event later than five working days prior to the date for receipt of bids.

Modifications and clarifications will be made by addenda as provided below.

Any interpretation of, or change in, the RFO will be made by addendum and shall become a part of the RFO and of any Agreement awarded. Addenda will be posted on the SFBid website (<https://sfbid.sfwater.org/>).

The SFPUC will make reasonable efforts to post in a timely manner any modifications to the RFO on the SFBid website (<https://sfbid.sfwater.org/>). The Respondent shall be responsible for ensuring that its bid reflects any and all addenda posted by the SFPUC prior to the bid due date regardless of

when the bid is submitted. The SFPUC will not be responsible for any other explanation or interpretation.

#### **4.6 Bid Submissions**

All bids must be submitted online via the SFBid website (<https://sfbid.sfwater.org/>).

Detailed bid response requirements are listed on the online response form within SFBid ("Proposal Response Form"). Please refer to the SFBid website and click the "Submit Proposal" button to view and complete the full Proposal Response Form.

Attachment C to this RFO must be completed and submitted in Excel spreadsheet format with the bid in order for the bid to be considered.

Bids must be submitted no later than 5:00 p.m. on **Wednesday, July 19, 2017**. All bids received after that time will be rejected. Respondents whose bids are selected for the RFO shortlist may be invited to submit optional supplemental materials.

For technical or procedural questions regarding the online submittal, please contact [sfbid@sfwater.org](mailto:sfbid@sfwater.org).

#### **4.7 Amendment or Withdrawal of Bids**

A Respondent may amend or withdraw its bid at any time before the expiration of the time for the submission of bids by (1) delivering a redlined version of the bid submittal in the same manner as specified for the original bid submittal, or (2) delivery of a written request for withdrawal, signed by, or on the behalf of, the Respondent.

#### **4.8 Rights of the SFPUC**

This RFO does not commit the SFPUC to enter into a contract with any Respondent nor does it obligate the SFPUC to pay for any costs incurred in preparation and submission of bids or in anticipation and execution of a contract. The SFPUC reserves the right to:

- Make the selection of bids based on its sole discretion;
- Reject any and all bids;
- Request any and all Respondents to provide additional information under this RFO;
- Prior to the submission deadline for bids, modify all or any portion of the selection procedures, including deadlines for accepting responses, the specifications or requirements for any supplies to be provided under this RFO, or the requirements for contents or format of the bids;
- In its sole discretion and without notice, suspend, or terminate this RFO without liability to any Respondent;
- Issue subsequent Requests for Offers or Proposals;
- Remedy technical errors in the RFO process or documents;
- Approve or disapprove the use of particular subcontractors;

- Negotiate with any or all of the Respondents;
- Accept a bid or bids that are not the lowest price offer;
- Waive informalities and irregularities in the bids; and/or
- Enter into a contract with another Respondent in the event the originally selected Respondent(s) defaults or fails to execute a contract with the SFPUC.

This RFO does not constitute an offer to buy or create an obligation for the SFPUC, CleanPowerSF, and/or City to enter into an agreement with any entity, and the SFPUC, CleanPowerSF, and City shall not be bound by the terms of any bid until the parties have entered into a fully executed agreement.

Failure by the SFPUC to object to an error, omission, or deviation in the bid will in no way modify the RFO or excuse the Respondent from full compliance with the specifications of the RFO or any contract awarded pursuant to this RFO. No waiver by the City of any provision of this RFO shall be implied from any failure by the City to recognize or take action in response to a failure by a Respondent to observe any provision of this RFO. No Respondent responding to this RFO shall obtain any claim or right of action against the SFPUC by reason of any aspect of the RFO, and defects or abnormalities contained herein, and defects or abnormalities in the selection process, the rejection of any bid, the acceptance of any bid, any statements, representation, acts or omissions of the SFPUC, the exercise of any SFPUC discretion set forth in or with respect to any of the foregoing, and any and all other matters arising out of all or any of the foregoing.

## **5. BID REQUIREMENTS AND MINIMUM QUALIFICATIONS**

This section sets forth the guidelines for the content and format of bids. Each Respondent may submit one or more bids in response to this RFO. Each bid may include several different pricing structures and project terms as provided for in the Bid Workbook (Attachment C). Respondents should review the instructions provided in the Bid Workbook (Attachment C) for additional information regarding the organization and submittal of the bid variations. The SFPUC anticipates entering into contracts with one or more winning Respondents through this RFO.

Respondents may submit bids for generating facilities that have not achieved commercial operation. For such facilities, Respondents must provide requested information regarding the project development status of the facility, as further described below.

### **5.1 Minimum Qualifications**

The City is seeking bids from entities sufficiently qualified, experienced and capable of providing the desired product. The following is a list of the City's minimum requirements for Respondent qualifications. Respondents that do not possess the required minimum qualifications shall be deemed not qualified, and shall not be scored. Bids must provide documentation sufficient to demonstrate that Minimum Qualifications described below have been met.

- If Respondent is bidding energy from a new ERR,
  - Senior Staff of Firm hold at least five (5) years of experience in the development of utility-scale renewable energy projects within the last ten (10) years. Please

submit a summary of relevant work experience (ie. resume, CV, etc.) through SFBid.

- Firm has developed or installed, or is currently operating at least 50 MW of project capacity. Please submit a summary of relevant projects (including size, location, COD, role of the Firm, etc.) through SFBid.
- Firm has demonstrated financial viability by providing at least one (1) financial institution letter of reference, or by providing access to latest financial statements (most recent two years plus a recent quarterly financial statement). Please submit the appropriate documentation through SFBid.
- If Respondent is bidding energy from an operating ERR,
  - Senior Staff of Firm hold at least five (5) years of experience operating utility-scale renewable energy projects and/or remarketing renewable energy within the CAISO Balancing Authority Area within the last ten (10) years. Please submit a summary of relevant work experience (ie. resume, CV, etc.) through SFBid.
  - Firm has developed or installed, or is currently operating at least 50 MW of project capacity. Please submit a summary of relevant projects (including size, location, COD, role of the Firm, etc.) through SFBid.
  - Firm has demonstrated financial viability by providing at least one (1) financial institution letter of reference, or by providing access to latest financial statements (most recent two years plus a recent quarterly financial statement). Please submit the appropriate documentation through SFBid.

## 5.2 Mandatory Bid Criteria

Failure to meet all of the following criteria shall be grounds for bid rejection. The selected Respondent(s) will be responsible for transferring the specified energy quantities to CleanPowerSF at the designated delivery point through the CAISO inter-scheduling coordinator trading process. Respondents shall serve as their own SC or make arrangements for a third party SC at no cost to CleanPowerSF.

### 5.2.1 The following mandatory bid criteria apply:

- Bids may be for firmed and shaped product or unit contingent, as-available product.
  - For firmed and shaped product, deliveries shall be equivalent to 100% of the volumes specified by the Respondent in its Bid Workbook (Attachment C) and may be from multiple generating facilities so long as each facility meets the qualifying criteria set forth in this RFO. Bids shall provide fixed hourly quantities delivered in the form of standard blocks of energy (e.g., 24x7, 6x16) or hourly quantities delivered in accordance with an alternative delivery shape (e.g., a prototypical solar profile) specified by Respondent. The proposed hourly block sizes shall be specified in Attachment C. *Deliveries shall NOT be shaped or firmed with coal or nuclear resources.*



- Bids for unit contingent, as-available renewable energy must specify hourly amounts equal to all or a specified fraction of a specific facility's energy production with minimum and maximum energy delivery requirements. The proposed hourly production forecast and annual volumes delivered shall be identified in the attached Bid Workbook (Attachment C).
- All renewable energy deliveries from new projects must meet the eligibility criteria for PCC 1 and be Green-e Energy eligible.
- All renewable energy deliveries from existing projects must meet the eligibility criteria for either PCC 1 or PCC 2. *Incremental Energy associated with PCC 2 deliveries shall not be sourced from coal or nuclear resources.*
- Both energy-only and fully deliverable products will be considered with the expected value of any RA capacity accounted for in the evaluative process.
- Bids may be for all or part of a generating facility's output.
- All generating facilities that will be used to supply power to CleanPowerSF must be identified by the Respondent in its bid (Attachment C), including generator name, fuel source, location, and RPS ID Number (if available).
- Bids of PCC 1 product shall include at least two pricing options:
  - A fixed \$/MWh price, for each year of the proposed contract term, for delivery to the generator node; and
  - A fixed \$/MWh price, for each year of the proposed contract term, for delivery to the NP 15 trading hub, as defined by the CAISO.
  - The fixed prices shall remain unchanged throughout the contract term and shall not be adjusted by period escalators or time of delivery multipliers/factors.
- Bids of PCC 2 product shall include a fixed \$/MWh price, for each year of the proposed contract term, for delivery to the NP 15 trading hub.

**5.2.2 Additional, mandatory criteria are as follows:**

- The term shall be no more than twenty-five (25) years (not including optional extension terms).
- A delivery commencement date no sooner than May 1, 2018 and no later than December 31, 2021.
- A minimum hourly quantity of no less than 1 MW.
- Total annual deliveries shall be at least 25,000 MWh and no more than 500,000 MWh.
- Bids may be for new or existing generating facilities.

**5.2.3 Optional Bid Components**

- CleanPowerSF encourages Respondents to present additional services or product offerings to enhance the standard Product, including co-location with storage and/or the potential for

the project site to accommodate additional renewable capacity. Respondents may propose unique contract provisions and pricing that apply to these enhanced proposals.

- Respondents may, in addition to the two pricing options required above, propose alternative pricing structures by providing a detailed narrative description of the pricing structure and additional pricing tables in the Bid Worksheet, Attachment C. For example, alternative pricing options may include alternative proposals for Respondent Development/Performance Assurance and/or CleanPowerSF collateral or credit support.
- For Bids with deliveries in excess of 5 years, Bidders are encouraged to propose mechanisms such as pricing structures, insurance products, or storage to manage curtailment risk over the term of the contract.
- A Community Benefits Plan, as described in Section 5.5, below.

### **5.3 Operating Track Record and Projects Under Development**

In addition to the Mandatory Bid Criteria set forth in Section 5.2 above, Respondents proposing to supply unit contingent, as-available energy from generating facilities that are currently operating shall provide:

- Historical 8760 generation for the last two years of plant operation (if applicable) and capacity factor (expressed as a percentage, based on monthly generation in MWh and rated capacity in MW). The information should be annotated to explain any below/above-average or atypical generation figures (noting any significant issues or extended unexpected outages). This information should be provided in the format specified in the Historical Generation tab of the Generation Profile Template (Attachment G).

Respondents proposing to supply energy from projects that have not yet achieved commercial operation shall provide documentation with the bid submittal demonstrating:

- If the facility is bid as fully/partially deliverable or as energy-only.
- If the facility is bid as fully or partially deliverable, the Respondent shall also indicate:
  - The date by which the project will have full or partial deliverability status ("FCDS/PCDS").
  - The project has received FCDS/PCDS or is in the Phase II process of the deliverability study; and
  - Evidence that all required Interconnection Financial Security has been posted for the project (Initial, Second, or Final) as required by the applicable Interconnection Process.
- The anticipated commercial operation date (COD).
- The facility's anticipated 8760 annual hourly generating profile. This information should be provided in the format specified in the Expected Generation tab of the Generation Profile Template (Attachment G).

Depending on the anticipated COD, the following Mandatory Bid Criteria apply. Respondents shall provide additional documentation to demonstrate the status of project site control, interconnection, permits, financing and project labor agreements.

For projects with anticipated CODs prior to July 2019, Respondents should provide the information requested in the table below.

For projects with anticipated CODs May 2018 - July 2019	
Site Control	100% site control for the project site and generator interconnection path for the entire proposed delivery term.
Interconnection	Progress in transmission or distribution interconnection for the facility that is equivalent to a completed System Impact Study, Phase I Study, or passed Wholesale Distribution Tariff/CAISO Fast Track screen, including, if available the anticipated interconnection completion date.
Permits	The status of all required governmental approvals, permits and environmental reviews, including the applicable agency, the type of approval requested, and the anticipated date of approval or permit issuance. Projects must complete all required environmental review prior to December 31, 2017.
Financing	The financing plan for the project in sufficient detail for the SFPUC to effectively evaluate the viability of such arrangements.
Project Labor Agreement (PLA)	Progress in executing a Project Labor Agreement (PLA) by December 31, 2017. PLA must be in place prior to commencement of construction activity.

For projects with anticipated CODs after July 2019, Respondents should provide as much information requested in the table below as possible.

For projects with anticipated CODs Jul. 2019 - Dec. 2021	
Site Control	100% site control for the project site and interconnection path 18 months prior to the proposed commercial operation date (COD) of the project.
Interconnection	Submission of an application with the applicable entity for the interconnection agreement for the specific project.

<b>Permits</b>	Commencement of the process to obtain key discretionary development permits and approvals for the project, including completion of all applicable environmental studies and reviews, 18 months prior to the proposed COD of the project.
<b>Financing</b>	The financing plan for the project in sufficient detail for the SFPUC to effectively evaluate the viability of such arrangements.
<b>Project Labor Agreement (PLA)</b>	Respondent will have a Project Labor Agreement (PLA) in place 18 months prior to the proposed COD of the project. PLA must be in place prior to commencement of construction activity.

#### 5.4 Locational Preference

CleanPowerSF has a preference for renewable generating resources located within California and within the nine (9) San Francisco Bay Area Counties.<sup>1</sup> California-based resources and resources located within the nine (9) San Francisco Bay Area Counties will receive higher evaluative value at five (5) points (equivalent to 5% of the bid score) when the SFPUC reviews responses to this RFO.

#### 5.5 Community Benefits

The RFO includes an optional Community Benefits component. Community Benefits *are firm commitments on the part of the bidder* to be delivered to the community in accordance with the SFPUC’s 2011 Community Benefits Policy and 2009 Environmental Justice Policy, which directs the SFPUC and its partner firms to be a good neighbor to all who are directly affected by its activities and investments. Respondents may, but are not required to, submit a Community Benefits proposal (“Community Benefits Submittal,” or “CB Submittal”) that identifies projects and/or activities that will promote the social and economic outcomes described in the SFPUC Community Benefits Policy. The CB Submittal is valued at five (5) points under the Evaluation Process located in Section 7 of this RFO. The CB Submittal will be submitted as an attachment in SFBid. The CB submittal will be reviewed and scored by a separate panel of community benefits specialists who will only see the CB submittal. For instructions on the Community Benefits Submittal and additional Community Benefits information see Attachment F. For a sample list of participating firms, examples of community benefits commitments, and templates of the final agreement language and reporting requirements, refer to Attachment F.

#### 5.6 Green-e Energy Eligibility

CleanPowerSF has a preference for renewable generating resources that are Green-e Energy eligible to meet its needs for customers that choose CleanPowerSF’s Premium Product. New ERRs shall be Green-e Energy eligible. Respondents should review the currently effective Green-e Energy National Standard for information regarding the eligibility criteria for such resources. A copy of the Green-e Energy National Standard as well as additional information regarding the Green-e Energy program can be accessed via the following web link:

[http://www.green-e.org/getcert\\_re\\_stan.shtml#standard](http://www.green-e.org/getcert_re_stan.shtml#standard).

<sup>1</sup> San Francisco, Alameda, Contra Costa, Marin, Napa, Sonoma, Solano, San Mateo, and Santa Clara.

## 6. CONTRACT FORM

The SFPUC intends to execute power purchase agreements with one or more selected respondents using the SFPUC’s Form PPAs (New ERRs; Existing ERRs) included as Attachment E. Term Sheets included as Attachment D indicate which contract terms are negotiable; all other sections of the PPAs are non-negotiable. However, the Form PPAs will be amended as necessary to reflect the elements of the selected bids, for example, additional language for PPC 2 energy deliveries, optional bid components, new or different Milestones to reflect the status of project development, or necessary changes required for project financing. The SFPUC may elect to use a Western System Power Pool (“WSPP”) Confirmation for shorter term contracts. The PPAs are subject to review and approval by the San Francisco Public Utilities Commission and the Board of Supervisors.

## 7. EVALUATION PROCESS

Bids that do not meet the mandatory bid criteria and information requirements in Section 5 of this RFO will be rejected.

For proposals featuring **New Eligible Renewable Energy Resources** the SFPUC will evaluate the bids based on the following criteria:

<b>QUALIFICATIONS AND EXPERIENCE OF RESPONDENT</b>	<b>Max. 20 points</b>
<b>Qualifications and Experience</b> <ul style="list-style-type: none"> <li>• Experience and track record of the Respondent and key personnel</li> <li>• Volume of energy supplied in the most recent calendar year</li> </ul>	10
<b>Financial Viability</b> <ul style="list-style-type: none"> <li>• Financial strength and viability of Respondent as exhibited by previous two years of financial statements</li> <li>• Credit support to be provided, if credit rating is below investment grade</li> </ul>	10
<b>TOTAL COST OF BID AND VALUE TO CLEANPOWERSF</b>	<b>Max. 40 points</b>
<b>Cost and Bid Value to CleanPowerSF</b> <ul style="list-style-type: none"> <li>• Impact of the proposed pricing in relation to the target CleanPowerSF rates (provides lowest net cost)</li> <li>• Contribution to CleanPowerSF long-term pricing stability and competitiveness (price and term of bid)</li> <li>• Value of energy and non-energy attributes (e.g., Resource Adequacy capacity; Storage; time of delivery value of energy)</li> <li>• Impact of the bid on CleanPowerSF’s operational costs, residual market exposure, financial risk and collateral requirements</li> </ul>	40

<b>PROJECT VIABILITY</b>	<b>Max. 20 points</b>
<b>Project / Proposal Viability</b> <ul style="list-style-type: none"> <li>• Likelihood that a project will meet the proposed COD <ul style="list-style-type: none"> <li>• Site Control</li> <li>• Interconnection</li> <li>• Permits</li> <li>• Financing</li> </ul> </li> <li>• Likelihood that a Project Labor Agreement (PLA) will be executed in the time frames described in the Mandatory Bid Criteria</li> </ul>	20
<b>GENERATING RESOURCE LOCATION &amp; PORTFOLIO COMPATIBILITY</b>	<b>Max. 15 points</b>
<b>Contribution to a Diversified CleanPowerSF Portfolio</b> <ul style="list-style-type: none"> <li>• The compatibility of the bid's proposed monthly energy deliveries and capacity attributes with CleanPowerSF's near-term needs</li> <li>• The bid's contribution to the development of a diverse portfolio (technologies; fuel types; resource locations; operating profiles)</li> </ul>	10
<b>Generating Resource Location</b> <ul style="list-style-type: none"> <li>• In-state resources preferred</li> <li>• Resources located within the 9 Bay Area Counties receive highest preference</li> </ul>	5
<b>COMMUNITY BENEFITS</b>	<b>Max. 5 points</b>
<ul style="list-style-type: none"> <li>• Community Benefits Proposal</li> </ul>	5

For proposals featuring **Existing Eligible Renewable Energy Resources** the SFPUC will evaluate the bids based on the following criteria:

<b>QUALIFICATIONS AND EXPERIENCE OF RESPONDENT</b>	<b>Max. 30 points</b>
<b>Qualifications and Experience</b> <ul style="list-style-type: none"> <li>• Experience and track record of the Respondent and key personnel</li> <li>• Volume of energy supplied in the most recent calendar year</li> </ul>	10
<b>Financial Viability</b> <ul style="list-style-type: none"> <li>• Financial strength and viability of Respondent as exhibited by previous two years of financial statements</li> <li>• Credit support to be provided, if credit rating is below investment grade</li> </ul>	20

<b>TOTAL COST OF BID AND VALUE TO CLEANPOWERSF</b>	<b>Max. 50 points</b>
<b>Cost and Bid Value to CleanPowerSF</b> <ul style="list-style-type: none"> <li>• Impact of the proposed pricing in relation to the target CleanPowerSF rates (provides lowest total cost)</li> <li>• Contribution to CleanPowerSF long-term pricing stability and competitiveness (price and term of bid)</li> <li>• Value of energy and non-energy attributes (Resource Adequacy capacity; Storage; time of delivery value of energy)</li> <li>• Impact of the bid on CleanPowerSF's operational costs, residual market exposure, financial risk and collateral requirements</li> </ul>	50
<b>GENERATING RESOURCE LOCATION &amp; PORTFOLIO COMPATIBILITY</b>	<b>Max. 15 points</b>
<b>Contribution to a Diversified CleanPowerSF Portfolio</b> <ul style="list-style-type: none"> <li>• The compatibility of the bid's proposed monthly energy deliveries and capacity attributes with CleanPowerSF's near-term needs</li> <li>• The bid's contribution to the development of a diverse portfolio (technologies; fuel types; resource locations; operating profiles)</li> </ul>	10
<b>Generating Resource Location</b> <ul style="list-style-type: none"> <li>• California-based resources preferred</li> <li>• Resources located within the 9 Bay Area Counties receive highest preference</li> </ul>	5
<b>COMMUNITY BENEFITS</b>	<b>Max. 5 points</b>
<ul style="list-style-type: none"> <li>• Community Benefits Proposal</li> </ul>	5

The SFPUC reserves the right to consider other factors in addition to those specified above and to request additional information from Respondents as needed to assist in selecting the proposal(s) for further consideration.

The SFPUC does not anticipate conducting oral interviews for this RFO. However, the SFPUC reserves the right to contact any Respondent for additional information or clarification of the terms of the bid.

## **8. PROTEST PROCEDURES**

### **8.1 Protest of Non-Responsiveness Determination**

After receipt of proposals, the SFPUC will conduct an Initial Screening of submitted proposals as set forth in Section 3 of this RFO. If staff determines that a proposal should be rejected because it is either non-responsive to RFO requirements or is otherwise unacceptable (i.e., fails to meet the

minimum qualification requirements set forth in the RFO), then the City will issue a Preliminary Notice of Proposal Rejection to the applicable Respondent(s).

If a Respondent believes that the City has incorrectly determined that its proposal should be rejected, Respondent may submit a written notice of protest within five (5) working days of the SFPUC's issuance of a Preliminary Notice of Proposal Rejection. Such notice of protest must be received by the SFPUC on or before the fifth (5th) working day following the SFPUC's issuance of the Preliminary Notice of Proposal Rejection. The notice of protest must include a written statement specifying in detail each and every one of the grounds asserted for the protest. The protest must be signed by an individual authorized to represent the Respondent, and must cite the law, rule, local ordinance, procedure or RFO provision on which the protest is based. In addition, the Respondent must specify facts and evidence sufficient for the SFPUC to determine the validity of the protest. The City, at its discretion, may make a determination regarding a protest without requesting further documents or information from the Respondent who submitted the protest. Accordingly, the initial protest must include all grounds of protest and all supporting documentation or evidence reasonably available to the prospective Respondent at the time the protest is submitted. If the Respondent later raises new grounds or evidence that were not included in the initial protest, but which could have been raised at that time, then the City may not consider such new grounds or new evidence.

Upon receipt of a timely and proper protest, the City will review the protest and conduct an investigation as it deems appropriate. As part of its investigation, the City may consider information provided by sources other than Respondent. The City may also consider supplemental correspondence or other information relating to the original ground(s) of Protest submitted by a protesting Respondent to the extent the City determines that such information will assist it in resolving the Protest. At the completion of its investigation, the City will provide a written determination to the Respondent who submitted the protest.

Protests not received within the time and manner specified will not be considered.

If a Respondent does not protest a Preliminary Notice of Proposal Rejection within the time and in the manner specified, above, then the City's determination set forth in the Preliminary Notice will become final. A Respondent's failure to protest as specified above on or before the time specified above shall constitute a complete and irrevocable waiver of the ground(s) of protest and forfeit the Respondent's right to raise such ground(s) of protest later in the procurement process, in a Government Code Claim, or in other legal proceedings.

## **8.2 Protest of Agreement Award**

As soon as the PPAs with the selected Respondent(s) are finalized, the SFPUC will post notice of the award on the SFBid website (<https://sfbid.sfwater.org/>). Within five (5) working days of the posting of the notice, any Respondent that has submitted a responsive proposal and believes that the City has unfairly selected another Respondent may submit a written notice of protest.

The notice of protest must include a written statement specifying in detail each and every one of the grounds asserted for the protest. The protest must be signed by an individual authorized to represent the Respondent, and must cite the law, rule, local ordinance, procedure or RFO provision



on which the protest is based. In addition, the Respondent must specify facts and evidence sufficient for the City to determine the validity of the protest. All protests must be received by the SFPUC on or before the fifth (5th) working day following the SFPUC's posting of the notice of award.

### **8.3 Delivery of Protests**

If a protest is mailed, the protestor bears the risk of non-delivery within the deadlines specified herein. Protests should be transmitted by a means that will objectively establish the date the City received the protest. Protests or notice of protests made orally (e.g., by telephone) will not be considered. Protests must be delivered to:

San Francisco Public Utilities Commission  
Contract Administration Bureau  
RE: Community Choice Aggregation Power Supplies (PRO.0077)  
525 Golden Gate Avenue, 8th Floor  
San Francisco, CA 94102

## **9. ADDITIONAL SFPUC REQUIREMENTS**

### **9.1 Respondent Proprietary Information**

In accordance with San Francisco Administrative Code Section 67.24(e), bids, responses to RFOs and all other records of communications between the City and persons or firms seeking contracts shall be open to inspection immediately after a contract has been awarded. Nothing in this provision requires the disclosure of a private person's or entity's net worth or other proprietary financial data submitted for qualification for a contract or other benefits until and unless that person or organization is awarded the contract or benefit. Information provided which is covered by this paragraph will be made available to the public upon request.

Proprietary data shall be specifically identified on every applicable page of the Respondent's proposal; Respondents should mark or stamp applicable sections and information as "Confidential" or "Proprietary". The City does not acknowledge, warrant, represent, or guarantee that any information so designated will be treated as confidential or proprietary information if disclosure is required under any applicable state, federal, or City law or regulation.

### **9.2 The Campaign Reform Ordinance**

Respondents must comply with Section 1.126 of the San Francisco Campaign and Governmental Code, which states:

No person who contracts with the City and County of San Francisco for the rendition of personal services, for the furnishing of any material, supplies or equipment to the City, or for selling any land or building to the City, whenever such transaction would require approval by a City elective officer, or the board on which that City elective officer serves, shall make any contribution to such an officer, or candidates for such an office, or committee controlled by such officer or candidate at any time between commencement of negotiations for such contract until (1) the termination of negotiations for such contract; or (2) three months have elapsed

from the date the contract is approved by the City elective officer, or the board on which that City elective officer serves.

If a Respondent is negotiating for a contract that must be approved by an elected local officer or the board on which that officer serves, during the negotiation period the Respondent is prohibited from making contributions to:

- The officer's re-election campaign;
- A candidate for that officer's office; and
- A committee controlled by the officer or candidate.

The negotiation period begins with the first point of contact, either by telephone, in person, or in writing, when a Respondent approaches any city officer or employee about a particular contract, or a city officer or employee initiates communication with a potential Respondent about a contract. The negotiation period ends when a contract is awarded or not awarded to the Respondent. Examples of initial contacts include: (i) a vendor contacts a city officer or employee to promote himself or herself as a candidate for a contract; and (ii) a city officer or employee contacts a Respondent to propose that the Respondent relating to a RFO, and requests to be placed on a mailing list do not constitute negotiations. Violation of Section 1.126 may result in the following criminal, civil, or administrative penalties:

1. Criminal: Any person who knowingly or willfully violates Section 1.126 is subject to a fine of up to \$5,000 and a jail term of not more than six months, or both.
2. Civil: Any person who intentionally or negligently violates Section 1.126 may be held liable in a civil action brought by the civil prosecutor for an amount up to \$5,000.
3. Administrative: Any person who intentionally or negligently violates section 1.126 may be held liable in an administrative proceeding before the Ethics Commission held pursuant to the Charter for an amount up to \$5,000 for each violation.

## 10. DEFINITIONS

**"Applicable Law"** means any statute, law, treaty, rule, tariff, regulation, ordinance, code, permit, enactment, injunction, order, writ, decision, authorization, judgment, decree or other legal or regulatory determination or restriction by a court or Governmental Authority of competent jurisdiction, or any binding interpretation of the foregoing, as any of them is amended or supplemented from time to time, that apply to either or both of the Parties or the terms of the Agreement.

**"Buyer"** means City and County of San Francisco, acting by and through its Public Utilities Commission, CleanPowerSF.

**"CAISO"** means the California Independent System Operator Corporation or the successor organization to the functions thereof.

**"CAISO Tariff"** means the California Independent System Operator Corporation, Fifth Replacement Federal ERC Electric Tariff as it may be amended, supplemented or replaced (in whole or in part) from time to time.

“CEC” means the California Energy Commission.

“City” means the City and County of San Francisco.

“CleanPowerSF” means the community choice aggregation program operated by City.

“CPUC” means the California Public Utilities Commission.

“ERR” shall mean an Eligible Renewable Energy Resource as such term is defined in Public Utilities Code Section 399.12 or Section 399.16.

“Full Capacity Deliverability Status” or “FCDS” has the meaning set forth in the CAISO Tariff.

“Green Attributes” means any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the generation from a Project, and its avoided emission of pollutants. Green Attributes include but are not limited to Renewable Energy Credits, as well as: (1) any avoided emission of pollutants to the air, soil or water such as sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO) and other pollutants; (2) any avoided emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change, or otherwise by law, to contribute to the actual or potential threat of altering the Earth’s climate by trapping heat in the atmosphere; (3) the reporting rights to these avoided emissions, such as Green Tag Reporting Rights. Green Tag Reporting Rights are the right of a Green Tag Purchaser to report the ownership of accumulated Green Tags in compliance with federal or state law, if applicable, and to a federal or state agency or any other party at the Green Tag Purchaser’s discretion, and include without limitation those Green Tag Reporting Rights accruing under Section 1605(b) of The Energy Policy Act of 1992 and any present or future federal, state, or local law, regulation or bill, and international or foreign emissions trading program. Green Tags are accumulated on a MWh basis and one Green Tag represents the Green Attributes associated with one (1) MWh of Energy. Green Attributes do not include (i) any energy, capacity, reliability or other power attributes from a project, (ii) production tax credits associated with the construction or operation of a project and other financial incentives in the form of credits, reductions, or allowances associated with the project that are applicable to a state or federal income taxation obligation, (iii) fuel-related subsidies or “tipping fees” that may be paid to Seller to accept certain fuels, or local subsidies received by the generator for the destruction of particular preexisting pollutants or the promotion of local environmental benefits, or (iv) emission reduction credits encumbered or used by a project for compliance with local, state, or federal operating and/or air quality permits. If a Project is a biomass or biogas facility and Seller receives any tradable Green Attributes based on the greenhouse gas reduction benefits or other emission offsets attributed to its fuel usage, it shall provide Buyer with sufficient Green Attributes to ensure that there are zero net emissions associated with the production of electricity from the Project.

“GWh” means gigawatt-hour.

“Interconnection Financial Security” has the meaning set forth in the CAISO Tariff.

“Inter-Scheduling Coordinator” or “Inter-SC Trades” has the meaning set forth in the CAISO Tariff.

“MW” means megawatt.

“MWh” means megawatt-hour.

**“Partial Capacity Deliverability Status”** or **“PCDS”** has the meaning set forth in the CAISO Tariff.

**“Portfolio Content Category 1”** or **“PCC1”** means Renewable Energy that satisfies the requirements of Section 399.16(b)(1) of the California Public Utilities Code.

**“Portfolio Content Category 2”** or **“PCC2”** means Renewable Energy that satisfies the requirements of Section 399.16(b)(1) of the California Public Utilities Code.

**“PPA”** means Power Purchase Agreement.

**“Renewable Energy”** means Energy and Green Attributes generated from an ERR that: (1) meets the requirements of Portfolio Content Category 1 or 2 as set forth in the California Public Utilities Code Section 399.16(b)(1), and (2) is generated in the same calendar year that it is delivered to City.

**“Renewable Energy Certificates”** or **“RECs”** has the meaning set forth in California Public Utilities Code Section 399.12(f) and CPUC decision 08-08-028 as may be amended from time to time or as further defined or supplemented by Applicable Law.

**“Renewables Portfolio Standard”** or **“RPS”** means the California renewables portfolio standard, as set forth in California Public Utilities Code §§ 399.11 et seq. and California Public Resources Code §§ 25740-25751, and as administered by the CEC as set forth in the CEC RPS Eligibility Guidebook (7th Ed.), as may be subsequently modified by the CEC, and the California Public Utilities Commission (“CPUC”) and as may be modified by subsequent decision of the CPUC or by subsequent legislation, and regulations promulgated with respect thereto.

**“Resource Adequacy”** or **“RA”** means the local and system resource adequacy capacity requirements established for load serving entities by the CPUC pursuant to the CPUC Decisions, the flexible capacity standards under the CAISO Tariff or by any other Governmental Authority having jurisdiction.

**“Scheduling Coordinator”** or **“SC”** means an entity certified by the CAISO as qualifying as a Scheduling Coordinator pursuant to the CAISO Tariff for the purposes of undertaking the functions specified in “Responsibilities of a Scheduling Coordinator” as set forth in the CAISO Tariff.

**“Seller”** or **“Supplier”** means the owner and operator of a power generating facility who will sell the product of the facility to the Buyer.

**“System Impact Study”** has the meaning set forth in the CAISO Tariff.

**“WECC”** means the Western Electricity Coordinating Council.

**“WREGIS”** means the Western Renewable Energy Generation Information System or any successor renewable energy tracking program.

**“WSPP Confirmation”** means Western System Power Pool Confirmation.

**RENEWABLE POWER PURCHASE AGREEMENT**

**(EXISTING FACILITY)**

**by and between**

**THE CITY AND COUNTY OF SAN FRANCISCO,**

**ACTING BY AND THROUGH ITS PUBLIC UTILITIES COMMISSION,  
CLEANPOWERSF**

**and**

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## **EXHIBITS**

The follows Exhibits constitute a part of this Agreement and are incorporated into the Agreement by reference.

<b>EXHIBIT A</b>	<b>SELLER DOCUMENTATION OF CONDITIONS PRECEDENT</b>
<b>EXHIBIT B</b>	<b>FACILITY DESCRIPTION AND SITE DRAWINGS</b>
<b>EXHIBIT C</b>	<b>CONTRACT QUANTITY</b>
<b>EXHIBIT D</b>	<b>INSURANCE COVERAGES</b>
<b>EXHIBIT E</b>	<b>SCHEDULING PROTOCOLS</b>
<b>EXHIBIT F-1</b>	<b>FORM OF LETTER OF CREDIT</b>
<b>EXHIBIT F-2</b>	<b>SIGHT DRAFT</b>
<b>EXHIBIT G</b>	<b>NOTIFICATION REQUIREMENTS FOR AVAILABLE CAPACITY AND PRODUCT OUTAGES AND CURTAILMENTS</b>
<b>EXHIBIT H</b>	<b>COMMUNITY BENEFITS COMMITMENTS</b>

**Attachment 1: SELLER'S COMMUNITY BENEFITS COMMITMENTS  
PROPOSAL**



# POWER PURCHASE AGREEMENT

## COVER SHEET

This Renewable Power Purchase Agreement (“Agreement”) is entered into between the City and County of San Francisco, acting by and through its Public Utilities Commission, Power Enterprise, CleanPowerSF program (“Buyer”) and [insert name of Seller], a \_\_\_\_\_ [include place of formation and business type] (“Seller”), as of \_\_\_\_\_ (the “Execution Date”). The Agreement shall include the exhibits, attachments, any written and fully executed supplements hereto, and any designated collateral, credit support, or similar arrangement between the Parties.

### A. Transaction

Product:

Facility:

Address:

Contract Capacity:

Contract Price:

Delivery Point:

CEC RPS ID:

Delivery Period:

Deliverability:

- Energy Only, or
- Full Capacity Delivery Status

### C. Collateral

Performance Assurance: \$ \_\_\_\_\_

- Cash,
- Guaranty, or
- Letter of Credit

**D. Notices:**

<p><b>City and County of San Francisco, acting by and through its Public Utilities Commission, CleanPowerSF (Buyer)</b></p>	<p><b>Seller:</b></p>
<p><b>All Notices:</b>  525 Golden Gate Ave, 7th Floor San Francisco, CA, 94102 Attn: Contract Administration Phone: 415-554-4603 Facsimile: 415-554-3225</p>	<p><b>All Notices:</b></p>
<p><b>Federal Tax ID Number:</b> 946000417</p>	<p><b>Federal Tax ID Number:</b> <b>DUNS Number:</b></p>
<p><b>Invoices:</b> Attn: Phone: Facsimile:</p>	<p><b>Invoices:</b> Attn: Phone: Facsimile:</p>
<p><b>Scheduling:</b> Attn: Phone: Facsimile: Email: Scheduling Desk: <a href="mailto:PowerScheduler@sfwater.org">PowerScheduler@sfwater.org</a></p>	<p><b>Scheduling:</b> Attn: Phone: Facsimile:  Email:</p>
<p><b>Payments:</b> Attn: Phone: Facsimile:</p>	<p><b>Payments:</b> Attn: Phone: Facsimile:</p>
<p><b>Wire Transfer:</b> BNK: ABA (ACH): ACCT:</p>	<p><b>Wire Transfer:</b> BNK: ABA: ACCT:</p>
<p><b>Credit and Collections:</b> Attn: Phone: Facsimile:</p> <p><b>With additional Notices of an Event of Default or Potential Event of Default to:</b></p>	<p><b>Credit and Collections:</b> Attn: Phone: Facsimile:</p> <p><b>With additional Notices of an Event of Default or Potential Event of Default to:</b></p>

## RECITALS

1. Seller owns and operates a \_\_\_\_\_ generating facility located at \_\_\_\_\_ ; and,
2. Buyer operates CleanPowerSF, a community choice aggregator that serves retail customers in the City and County of San Francisco; and,
3. Buyer is willing to purchase, and Seller is willing to sell, Product from the Facility, on the terms and conditions and at the prices set forth in this Agreement.

**NOW THEREFORE**, in consideration of the recitals above and the following covenants, terms and conditions, the Parties agree as follows:

## ARTICLE 1: DEFINITIONS

**AC:** Means alternating current.

**Affiliate:** With respect to any person, any other person (other than an individual) that, directly or indirectly, through one or more intermediaries, controls, or is controlled by, or is under common control with, such person. For this purpose, “control” means the direct or indirect ownership of fifty percent (50%) or more of the outstanding capital stock or other equity interests having ordinary voting power.

**Agreement:** Has the meaning set forth in the Cover Sheet.

**Agreement Term:** Has the meaning set forth in Section 2.2(a).

**Ancillary Services:** Has the meaning set forth in the CAISO Tariff.

**Applicable Law:** Any statute, law, treaty, rule, tariff, regulation, ordinance, code, permit, enactment, injunction, order, writ, decision, authorization, judgment, decree or other legal or regulatory determination or restriction by a court or governmental authority of competent jurisdiction, including the CAISO (“Governmental Authority”), or any binding interpretation of the foregoing, as any of them is amended or supplemented from time to time, that apply to either or both of the Parties or the terms of the Agreement.

**Availability Standards:** The program set forth in Section 40.9 of the CAISO Tariff, as it may be amended, supplemented or replaced (in whole or in part) from time to time, setting forth certain standards regarding the desired level of availability for Resource Adequacy resources and possible charges and incentive payments for performance thereunder.

**Bankrupt:** With respect to any entity, such entity (a) files a petition or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause of action under any bankruptcy, insolvency, reorganization or similar law, or has any such petition filed or commenced against it and such case filed against it is not dismissed in sixty (60) calendar days, (b) makes an assignment or any general arrangement for the benefit of creditors, (c) otherwise becomes bankrupt or insolvent (however evidenced), (d) has a liquidator, administrator, receiver, trustee, conservator or similar official appointed with respect to it or any substantial portion of its property or assets, or (e) is generally unable to pay its debts as they fall due.

**Board of Supervisors:** Means the Board of Supervisors for the City and County of San Francisco.

**Business Day:** Means any day except a Saturday, Sunday, a Federal Reserve Bank holiday, or a City and County of San Francisco holiday and shall be between the hours of 8:00 a.m. and 5:00 p.m. local time for the relevant Party’s principal place of business. The relevant Party, in each instance unless otherwise specified, shall be the Party from whom the notice, payment or delivery is being sent and by whom the notice or payment or delivery is to be received.

**Buyer:** The City and County of San Francisco, acting by and through its Public Utilities Commission.

**Buyer Curtailed Product:** Has the meaning set forth in Section 5.3(h)(ii)(B).

**CAISO:** The California Independent System Operator Corporation, or its functional successor.

**CAISO Tariff:** The California Independent System Operator Corporation, Fifth Replacement FERC Electric Tariff, as it may be amended, supplemented or replaced (in whole or in part) from time to time.

**Capacity Attributes:** Means any current or future defined characteristic (including the ability to generate at a given capacity level, provide Ancillary Services, and ramp up or ramp down at a given rate), certificate, tag, credit, flexibility, or dispatchability attribute, whether general in nature or specific as to the location or any other attribute of the Facility, intended to value any aspect of the capacity of the Facility to produce energy, including any accounting construct, or any other measure by the CPUC, the CAISO, the FERC, or any other Governmental Authority, to require Buyer to procure, or to procure at Buyer's expense, Resource Adequacy or other such attribute.

**CEC:** Means the California Energy Commission or any successor agency.

**CEC Certification:** Means that the CEC has certified that the Facility is an ERR for purposes of the California Renewables Portfolio Standard and that all Product produced by the Facility qualifies as generation from an ERR for purposes of the RPS.

**Change in Law:** Has the meaning set forth in Section 12.5(f).

**City:** The City and County of San Francisco.

**CleanPowerSF:** Means the Buyer's Community Choice Aggregation Program.

**Compliance Cost:** Has the meaning set forth in Section 3.7(a).

**Compliance Cost Cap:** Has the meaning set forth in Section 3.7.

**Confidential Information:** Has the meaning set forth in Section 12.2(b).

**Contract Capacity:** As set forth on the Cover Sheet.

**Contract Quantity:** The annual Energy production set forth in Exhibit C.

**Contract Price:** Has the meaning set forth in Section 3.2.

**Contract Year:** A period of twelve (12) consecutive months, commencing at 12:00 a.m. on the Delivery Start Date, and each subsequent Contract Year commencing on the twelve (12) month anniversary of the Delivery Start Date.

**Controller:** The Controller for the City and County of San Francisco.

**Costs:** With respect to a Non-Defaulting Party, (a) brokerage fees, commissions and other similar third party transaction costs and expenses reasonably incurred by such Party either in terminating any arrangement entered into pursuant to this Agreement or entering into new arrangements which replace this Agreement and (b) all reasonable attorneys' fees and expenses incurred by the Non-Defaulting Party in connection with the termination of this Agreement.

**CPUC:** The California Public Utilities Commission or any successor entity.

**Credit Rating:** With respect to any entity, the rating then assigned to such entity's unsecured senior long-term debt obligations (not supported by third party credit enhancements) or if such entity does not have a rating for its unsecured senior long-term debt, then the rating assigned to such entity as an issuer rating by S&P and/or Moody's.

**Cure:** Has the meaning set forth in Section 6.3(b).

**Curtailment Order:** An order of the PTO, distribution provider, and/or CAISO (whether directly or through a Scheduling Coordinator or the PTO), for any reason, including, but not limited to, any System Emergency, any warning of an anticipated System Emergency, or any warning of an imminent condition or situation which could jeopardize the CAISO's or PTO's electric system integrity or the integrity of

other systems to which the CAISO or the PTO is connected, including curtailment in accordance with Seller's obligations under its Interconnection Agreement with the PTO or distribution operator.

**DA Price:** The resource specific locational marginal price ("LMP") applied to the PNode applicable to the Facility in the CAISO Day-Ahead Market.

**Day-Ahead Market:** Has the meaning set forth in the CAISO Tariff.

**Defaulting Party:** Means the Party that has caused an Event of Default.

**Deficit Month:** Has the meaning set forth in Section 3.5(c)(iii).

**Delivered Energy:** Has the meaning set forth in Section 4.1(a).

**Delivery Point:** Means \_\_\_\_\_.

**Delivery Start Date:** Has the meaning set forth in Section 2.2(b).

**Delivery Term:** Has the meaning set forth in Section 2.2(b).

**Discretionary Curtailment:** Has the meaning set forth in Section 5.3(h)(ii)(A).

**Early Termination Date:** Has the meaning set forth in Section 9.2(a)(i).

**Effective Date:** Means the date on which all of the Conditions Precedent set forth in Section 2.1(a) have been satisfied or waived in writing by both Parties.

**Eligible LC Bank:** Means a U.S. commercial bank or a foreign bank with a U.S. branch, with such bank having a credit rating of at least from A3 from Moody's or A- from S&P.

**Eligible Renewable Energy Resource or ERR:** Has the meaning set forth in California Public Utilities Code Section 399.12 and California Public Resources Code Section 25741, as either code provision is amended or supplemented from time to time.

**Energy:** Means three-phase, 60-cycle alternating current electric energy measured in MWh and net of auxiliary loads and station electrical uses (unless otherwise specified).

**Environmental Attributes:** Means any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the generation from the Facility or Expansion Facility(s) (to the extent of sales to Buyer of Expansion Facility Product pursuant to Section 3.9), and its avoided emission of pollutants. Environmental Attributes include, without limitation, Renewable Energy Credits as well as:

- (a) any avoided emissions of pollutants to the air, soil or water such as sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO) and other pollutants;
- b) any avoided emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere; and
- (c) the reporting rights to these avoided emissions such as Green Tag Reporting Rights. Green Tag Reporting Rights are the right of Green Tag Purchaser to report the ownership of accumulated Green Tags in compliance with federal or state law, if applicable, and to a federal or state agency or any other party at the Green Tags Purchaser's discretion, and include without limitation those Green Tag Reporting Rights accruing under Section 1605(b) of The Energy Policy Act of 1992 and any present or future federal, state, or local law, regulation or bill, and international or foreign emissions trading program. Green Tags are accumulated on a MWh basis and one Green Tag represents the Environmental Attributes associated with one (1) MWh of Energy.

Environmental Attributes do not include:

- (i) any Energy, capacity, reliability or other power attributes from the Facility,

- (ii) production tax credits associated with the construction or operation of the Facility and other financial incentives in the form of credits, reductions, or allowances associated with the Facility that are applicable to a state or federal income taxation obligation,
- (iii) fuel-related subsidies or “tipping fees” that may be paid to Seller to accept certain fuels, or local subsidies received by the generator for the destruction of particular preexisting pollutants or the promotion of local environmental benefits, or
- (iv) emission reduction credits encumbered or used by a Facility for compliance with local, state, or federal operating and/or air quality permits. If the Facility is a biomass or biogas facility and Seller receives any tradable Environmental Attributes based on the greenhouse gas reduction benefits or other emission offsets attributed to its fuel usage, it shall provide Buyer with sufficient Environmental Attributes to ensure that there are zero net emissions associated with the production of electricity from the Facility.

**Event of Default:** Has the meaning set forth in Section 9.1.

**Excess Quantity:** Has the meaning set forth in Section 3.3(c).

**Execution Date:** Means the date set forth in the Cover Sheet.

**Expansion Facility:** Any expansion of the Facility from its Initial Capacity, or any other electricity generating facility owned or controlled by Seller or its affiliates, located at the Site. Each such expansion of the Facility or additional facility shall be deemed to be an “Expansion Facility.”

**Expansion Facility Product:** All Product, associated Environmental Attributes, Ancillary Services, contributions towards Resource Adequacy or reserve requirements (if any) and any other reliability or power attributes produced by Seller at any Expansion Facility.

**Extended Delivery Term:** Has the meaning set forth in Section 2.2(c).

**Facility:** The power generation facilities owned and operated by Seller as described in Exhibit B, but not including any Expansion Facility.

**FERC:** The Federal Energy Regulatory Commission and any successor organization.

**Force Majeure:** An event or circumstance, including a natural disaster, war, riot, or civil disturbance, which prevents one Party (“Claiming Party”) from performing its material obligations under this Agreement, which event or circumstance was not anticipated as of the Execution Date, which is not within the reasonable control of, or the result of the action or inaction of, the Claiming Party, and which, by the exercise of due diligence, the Claiming Party is unable to overcome or avoid or cause to be avoided. Neither Party may raise a claim of Force Majeure based in whole or in part on;

- (a) failures or delays by the PTO and/or the CAISO in entering into, or performing under, any agreements with Seller contemplated by this Agreement;
- (b) a strike, work stoppage or labor dispute;
- (d) Seller’s failure to obtain additional funds, including funds authorized by a state or the federal government or agencies thereof, to supplement the payments made by Buyer pursuant to this Agreement;
- (e) Seller’s inability to obtain Permits of any type, except where such failure is solely caused by a Force Majeure Event;
- (f) a Forced Outage except where such Forced Outage is caused by an event of Force Majeure;
- (g) a Curtailment Order; or
- (h) economic conditions that render a Party’s performance of this Agreement at the Contract Price unprofitable or otherwise uneconomic, including buyer’s ability to buy Energy at a lower price, or Seller’s ability to sell Energy generated by the Facility at a higher price).

**Forced Outage:** Any unplanned reduction or suspension of the Energy from the Facility or unavailability of the Product in whole or in part from a unit in response to a mechanical, electrical, or

hydraulic control system trip or operator-initiated trip in response to an alarm or equipment malfunction and any other unavailability of a unit for operation, in whole or in part, for maintenance or repair that is not a Planned Outage and not the result of Force Majeure.

**GAAP or Generally Accepted Accounting Principles:** The standards for accounting and preparation of financial statements established by the Federal Accounting Standards Advisory Board (or its successor agency) or any successor standards adopted pursuant to relevant Securities Exchange Commission rule.

**Gains:** With respect to any Party, an amount equal to the present value of the economic benefit to it, if any (exclusive of Costs), resulting from the termination of the Agreement for the remainder of the Term, determined in a commercially reasonable manner, subject to Section 9.3 hereof. Factors used in determining economic benefit may include reference to information either available to it internally or supplied by one or more third parties, including quotations (either firm or indicative) of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets, market price referent, market prices for a comparable transaction, forward price curves based on economic analysis of the relevant markets, settlement prices for a comparable transaction at liquid trading hubs (e.g., NYMEX), all of which should be calculated for the remainder of the Term to determine the value of the Product, including the value of Environmental Attributes and Capacity Attributes.

**GEP Period:** Means successive periods consisting of two (2) consecutive Contract Years with the first GEP Period commencing on the Contract Delivery Start Date, and with each subsequent GEP Period commencing on the twelve (12) month anniversary of the commencement of the prior GEP Period.

**Good Utility Practice:** Has the meaning in the CAISO Tariff.

**Governmental Authority:** Any federal or state government, or political subdivision thereof, including, without limitation, any municipality, township or county, or any entity or authority exercising executive, legislative, judicial, regulatory or administrative functions of or pertaining to government, including, without limitation, the CAISO or any corporation or other entity owned or controlled by any of the foregoing.

**Guaranteed Energy Production, or GEP:** Has the meaning set forth in Section 3.4(a).

**Guarantor:** Means, with respect to Seller, any Person that (a) is reasonably acceptable to Buyer, (b) has a Credit Rating of A- or better from S&P or a Credit Rating of A3 or better from Moody's, (c) is incorporated or organized in a jurisdiction of the United States and is in good standing in such jurisdiction, and (d) executes and delivers a Guaranty for the benefit of Buyer.

**Guaranty:** Means a guaranty from a Guarantor provided for the benefit of Buyer as reasonably acceptable to Buyer.

**Indemnified Party:** Has the meaning set forth in Section 10.1.

**Indemnifying Party:** Has the meaning set forth in Section 10.1.

**Interconnection Agreement:** The agreement and associated documents (or any successor agreement and associated documentation) by and among Seller, the Participating TO and the CAISO governing the terms and conditions of Seller's interconnection with the CAISO grid, including any description of the plan for interconnection of the Facility to the Participating TO's system.

**Inter-Scheduling Coordinator or Inter-SC Trades:** Has the meaning set forth in the CAISO Tariff.

**Late Payment Penalty:** Has the meaning set forth in Section 4.1(b).

**Lender(s):** Any Person(s) providing money or extending credit (including any capital lease) to Seller, including in the form of debt or tax equity, for (a) the construction of the Facility, (b) the term or permanent financing of the Facility, or (c) working capital or other ordinary business requirements for the Facility. "Lender(s)" shall not include any trade creditor(s) of Seller.

**Letter of Credit:** An irrevocable, non-transferable standby letter of credit issued by an Eligible LC Bank that is substantially similar to the form contained in Exhibit F-1. Costs of a Letter of Credit shall be borne by the applicant for such Letter of Credit.

**LMP:** Has the meaning set forth in the definition of DA Price.

**Losses:** With respect to any Party, an amount equal to the present value of the economic loss to it, if any (exclusive of Costs), resulting from the termination of this Agreement for the remainder of the Term, determined in a commercially reasonable manner, subject to Section 9.3 hereof. Factors used in determining the loss of economic benefit may include reference to information either available to it internally or supplied by one or more third parties, including quotations (either firm or indicative) of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets, market price referent, market prices for a comparable transaction, forward price curves based on economic analysis of the relevant markets, settlement prices for a comparable transaction at liquid trading hubs (e.g. NYMEX), all of which should be calculated for the remainder of the Term to determine the value of the Product, including Environmental Attributes and Capacity Attributes. If the Non-Defaulting Party is the Seller, then in addition to lost payments for Product pursuant to this Agreement, "Losses" shall exclude any associated loss of investment tax credits and other lost tax benefits.

**MWh:** Mega-watt hour.

**NERC:** Means the North American Electric Reliability Corporation or a successor organization.

**Negative LMP:** In any Settlement Interval in the Day-Ahead Market or Real-Time Market, the LMP at the Delivery Point is less than zero dollars (\$0).

**Network Upgrades:** Has the meaning set forth in the CAISO Tariff.

**Non-Defaulting Party:** Has the meaning set forth in Section 9.2(a).

**Participating Transmission Owner or PTO:** Has the meaning set forth in the CAISO Tariff. The PTO is \_\_\_\_\_.

**Parties:** Buyer and Seller, and their respective successors and permitted assignees.

**Party:** Buyer or Seller, and each such Party's respective successors and permitted assignees.

**Performance Assurance:** The collateral provided by Seller to Buyer to secure Seller's obligations hereunder in accordance with Section 6.2(a)(ii) of this Agreement.

**Performance Liquidated Damages or Performance LDs:** Has the meaning set forth in Section 3.4(c).

**Permits:** All material federal, state or local authorizations, certificates, permits, licenses and approvals required by any Governmental Authority for the construction, ownership, operation and maintenance of the Facility, including any such permits or approvals required under CEQA or the National Environmental Policy Act, 42 U.S.C. Sections 4321 et. seq.

**Person:** An individual, partnership, corporation, business trust, limited liability company, joint stock company, trust, unincorporated association, joint venture, Governmental Authority or other entity.

**Planned Outage:** The removal of equipment from service availability for inspection and/or general overhaul of one or more major equipment groups. To qualify as a Planned Outage, the maintenance (a) must actually be conducted during the Planned Outage, and in Seller's sole discretion must be of the type that is necessary to reliably maintain the Facility, (b) cannot be reasonably conducted during Facility operations, and (c) causes the generation level of the Facility to be reduced by at least ten percent (10%) of the Contract Capacity.

**PNode:** Has the meaning set forth in the CAISO Tariff.

**Point of Interconnection:** The point on the electrical system where the Facility is physically interconnected with the PTO System.



**Product:** The Energy, Environmental Attributes, Capacity Attributes, Ancillary Services, and any and all other reliability, power, or environmental attributes which are or can be produced by or associated with the Facility.

**PTO System:** The transmission system owned by the Participating Transmission Owner.

**Public Records Laws:** Means the California Public Records Act, California Government Code Sections 6250 et seq., and the San Francisco Sunshine Ordinance, San Francisco Administrative Code, Chapter 67, the Ralph M. Brown Act, California Government Code Sections 54950, et seq., and any other applicable law regarding public records as may be amended from time to time.

**Real-Time Market:** Has the meaning set forth in the CAISO Tariff.

**REC or Renewable Energy Credit:** Has the meaning set forth in California Public Utilities Code Section 399.12(h) and CPUC Decision 08-08-028, as may be amended from time to time or as further defined or supplemented by applicable law.

**Replacement Price:** Means, in MWh, Buyer's actual, reasonable cost of Replacement Product plus five percent (5%).

**Replacement Product:** Means energy produced from a facility other than the Facility that at the time of delivery to Buyer qualifies as an ERR and which (1) has the same or similar Environmental Attributes, including RECs, that would have been generated by the Facility during the Contract Year for which the Replacement Product is provided, and (2) equivalent Capacity Attributes that would have been provided by the Facility during the Contract Year for which the Replacement Product is provided.

**Resource Adequacy:** The resource adequacy capacity requirements established for load serving entities by the CPUC pursuant to the CPUC Decisions D.04-01-050, 04-10-035 and 05-10-042, 06-04-040, 06-06-064, 06-07-031, 07-06-029, 08-06-031, 09-06-028, 10-06-036, 11-06-022, 12-06-025, 13-06-024, and any other existing or subsequent decisions, resolutions or rulings addressing Resource Adequacy issues, as those obligations may be altered from time to time, the flexible capacity standards under the CAISO Tariff, or by any other Governmental Authority having jurisdiction.

**RPS:** Means the California Renewable Portfolio Standard as set forth in California Public Utilities Code Sections 399.11 et. seq. and California Public Resources Code Sections 25740, et. seq., as such provisions are amended or supplemented from time to time.

**Scheduling Coordinator:** Has the meaning set forth in the CAISO Tariff.

**Seller:** Has the meaning in the Preamble, and any successor or permitted assignee.

**Seller Excused Hours:** For each GEP Period, an amount expressed in MWh, equal to the aggregate amount of reduction(s) in delivered Product during such GEP Period as a result of Curtailment Orders, Discretionary Curtailment, Force Majeure Events, Buyer's breach or default hereunder or failure to accept delivered Product, or Forced Outages to the local transmission or distribution system.

**Settlement Interval:** Has the meaning set forth in the CAISO Tariff.

**SFPUC:** The San Francisco Public Utilities Commission.

**Site:** The physical location of the Facility as described on Exhibit B.

**Site Drawings:** Has the meaning set forth on Exhibit B.

**Surplus Energy:** Has the meaning set forth in Section 3.2(b).

**System Emergency:** Has the meaning set forth in the CAISO Tariff.

**Termination Payment:** With respect to the Non-Defaulting Party, the sum of (a) the Losses or Gains, and Costs, which such Party incurs as a result of the termination of this Agreement pursuant to Section 9.3, plus (b) the sum of all amounts then owed to the Non-Defaulting Party by the defaulting Party determined as of the Early Termination Date.

**WECC:** Means the Western Electricity Coordinating Council or successor agency.

**WREGIS:** The Western Renewable Energy Generation Information System, or any successor renewable energy tracking program.

**WREGIS Certificate:** Has the meaning set forth in the WREGIS Operating Rules and are designated as eligible for compliance with the California RPS.

**WREGIS Certificate Deficit:** Means any deficit or shortfall in WREGIS Certificates delivered to Buyer for a calendar month as compared to the delivered Product for the same calendar month, after taking into account applicable delays in the issuance of WREGIS Certificates or otherwise arising under WREGIS Operating Rules.

**WREGIS Operating Rules:** Means those operating rules and requirements adopted by WREGIS as of December 2010, as subsequently amended, supplemented or replaced from time to time.

## ARTICLE 2: CONDITIONS PRECEDENT AND TERM

### 2.1 Conditions Precedent to Commencement of Term of Agreement.

- (a) Conditions Precedent. The Term of this Agreement shall not commence until the occurrence of all of the following:
- (i) Buyer receives from Seller the conditions precedent documentation listed in Exhibit A; and
  - (ii) Buyer receives from Seller the Performance Assurance; and
  - (iii) This Agreement has been approved, if required, by the San Francisco Public Utilities Commission and the San Francisco Board of Supervisors; and
  - (iv) The Controller has certified in accordance with the City's Charter that sufficient unencumbered balances are available in the proper fund.
- (b) Effective Date. The Effective Date of this Agreement shall be the date that the all of the Conditions Precedent set forth in Section 2.1(a) have been satisfied or waived in writing by both Parties.
- (c) Failure to Meet All Conditions Precedent. If the Conditions Precedent set forth in Sections 2.1(a) are not satisfied or waived in writing by both Parties within ninety (90) Business Days of full execution of this Agreement, then either Party may terminate this Agreement effective upon receipt of notice by the other Party. Neither Party shall have any obligation or liability to the other, including for a Termination Payment or otherwise, as a result of such termination and Buyer shall return the Development Assurance to Seller.

### 2.2 Agreement Term, Delivery Term, and Extension.

- (a) Agreement Term. The term of this Agreement shall commence, and this Agreement shall be effective, upon the Effective Date and, unless earlier terminated pursuant to an express provision of this Agreement, shall remain in effect until the delivery to Buyer of all of the Environmental Attributes under this Agreement (the "Term").
- (b) Delivery Term. The Delivery Term shall commence \_\_\_\_\_ (the "Delivery Start Date") from and including Hour Ending ("HE") 0100 and continue through and including HE 2400 on \_\_\_\_\_ ("Delivery Term"), unless terminated as provided by the terms of this Agreement.
- (c) Extension of End of Delivery Term.
- (i) At its sole discretion, Buyer may provide notice to Seller no later than twelve (12) months prior to the end of Delivery Term of its desire to extend the Delivery Term of this Agreement ("Extended Delivery Term"). Buyer and

Seller shall promptly enter into good faith negotiations on the price and term for the Extended Delivery Term. If the Parties are unable to reach agreement within ninety (90) calendar days of notice under this Section, neither Party shall have any further obligation to negotiate for an Extended Delivery Term and Seller may enter into negotiations with third parties.

- (ii) If Seller receives a bona fide offer from a third party to purchase the output of the Facility at the end of the Term, Seller shall immediately notify Buyer of the price and terms of the offer and Buyer shall have the right of first refusal to extend the Term at the same price. If Buyer wishes to accept such offer, Buyer shall so notify Seller within seven (7) business days of its receipt of such offer. Buyer and Seller shall promptly thereafter enter into good faith negotiation of commercial modifications to this Agreement for the Extended Delivery Term.

### ARTICLE 3: PURCHASE AND SALE

#### 3.1 Purchase and Sale of Product.

- (a) Transaction. During the Delivery Term, Seller shall sell and deliver, or cause to be delivered, and Buyer shall purchase and receive, or cause to be received, the Product at the Delivery Point, and Buyer shall pay Seller for delivered Product in accordance with the terms of this Agreement, unless specifically excused by the terms of this Agreement. In no event shall Seller have the right to procure any element of the Product from sources other than the Facility for sale or delivery to Buyer under this Agreement, or sell Product from the Facility to a third party (Subject to Sections 3.4(d) and (e), and 3.9). Buyer shall have no obligation to receive or purchase Product from Seller prior to or after the Delivery Term.
- (b) Title and Risk of Loss. Title to and risk of loss as to all Product purchased by Buyer shall pass from Seller to Buyer at the Delivery Point. Seller shall be responsible for any costs, fees, taxes, assessments, or charges associated with the Product or the delivery of the Product up to the Delivery Point. Buyer shall be responsible for any costs, or charges imposed on or associated with the Product or the delivery of the Product at and from the Delivery Point. Seller warrants that it shall deliver all Product to Buyer free and clear of all liens, security interests, claims and encumbrances or any interest therein or thereto created by any Person other than Buyer.

**3.2 Contract Price.** Buyer shall pay Seller \$\_\_\_\_\_ per MWh for Product delivered pursuant to this Agreement and Curtailed Product. The Contract Price shall be the total compensation owed by Buyer for the Product, adjusted as follows:

- (a) Excess Quantity Price. For all Product in excess of one hundred and fifteen percent (115%) of the Expected Energy Production for the then-current Contract Year, Buyer shall pay Seller fifty percent (50%) of the Contract Price.

**OR**

Excess Quantity. Buyer is not obligated to accept delivery of, or pay for, any Product in excess of one hundred and fifteen percent (115%) of the Expected Energy Production for the then-current Contract Year ("Excess Quantity"). Seller shall have the right to sell any Excess Quantity to a third party.

- (b) Surplus Energy Price. If during any Settlement Interval, Seller delivers Product amounts in excess of the Contract Capacity (“Surplus Energy”), then the price applicable to all such excess MWh in such Settlement Interval shall be zero dollars (\$0), and if there is a Negative LMP during such Settlement Interval, Seller shall pay to Buyer an amount equal to the Negative LMP times the amount of the Surplus Energy in MWh.

**3.3 Contract Quantity.** The Contract Quantity for Product is set forth in Exhibit C.

**3.4 Guaranteed Energy Production.**

- (a) Guaranteed Energy Production. For each GEP Period throughout the Term, Seller shall deliver no less than one hundred and sixty percent (160%) of (i) the Contract Quantity for the GEP Period, minus (ii) the Seller Excused Hours (“Guaranteed Energy Production” or “GEP”).
- (b) Reporting. No less frequently than quarterly during each year, Seller shall calculate and provide notice to Buyer of the then-cumulative amount of the Seller Excused Hours for such year, along with an explanation in reasonable detail of the calculation thereof based on historical Facility data, meteorological data, Product projections (including by the CAISO, if applicable) and other relevant data. The calculation shall be subject to review and approval by Buyer.
- (c) Performance LDs. If Seller fails to meet the GEP, then within sixty (60) days after the end of the relevant GEP Period Buyer shall notify Seller of the quantity of the shortfall and the amount of the Performance LDs. Within thirty (30) days after the receipt of notice of the shortfall, Seller shall either (1) provide Replacement Product in the amount of the GEP shortfall, or (2) pay Buyer Performance LDs calculated as: the positive difference obtained by subtracting the (i) Contract Price from (ii) the Replacement Price, multiplied by the GEP shortfall. The Parties agree that, consistent with Section 9.3(b), the damages Buyer would incur due to Seller’s failure to meet the GEP would be difficult or impossible to predict with certainty and the Performance LD amount is a reasonable approximation of such damages.

If within ten (10) Business Days of receipt of notice of a GEP shortfall, Seller does not either provide notice to Buyer of its election to provide Replacement Product or deliver payment of the Performance LD amount to Buyer, Buyer shall be entitled to collect Performance LDs by electing, in its sole discretion, one or more of the following payment methods:

- (i) drawing upon the Performance Assurance;
- (ii) setting off against any amounts owed to Seller by Buyer under this Agreement.
- (d) Seller may as an alternative to payment of Performance LDs pursuant to this section, provide Replacement Product within ninety (90) days after the conclusion of the applicable GEP Period but within the same calendar year as the conclusion of the applicable GEP Period. The Replacement Product shall be delivered to Buyer at the NP 15 EZ Gen Hub upon a schedule reasonably acceptable to Buyer. Buyer will pay Seller for all such Replacement Product provided pursuant to this Section 3.4(d) at the lower of: (1) the Contract Price, or (2) the hourly DA price at the Delivery Point for the Replacement Product.
- (e) Notwithstanding any other provision of this Agreement, if in any consecutive three (3) month of the Term of the Agreement, the actual Product deliveries are less than fifty percent (50%) of the monthly quantities for that three month period set forth in the Seller’s Annual Forecast minus any Seller Excused Hours for that month, Buyer shall have the right to require Seller to provide Replacement Product as set forth in Section 3.4(d). Pursuant to Section 9.1(b)(iii), Seller’s failure to deliver at least fifty percent

(50%) expected monthly quantities, excluding Seller Excused Hours for twelve (12) consecutive months shall constitute a default of this Agreement.

### 3.5 Environmental Attributes.

- (a) Purchase and Sale of Environmental Attributes. During the Term, Seller shall sell and transfer to Buyer, and Buyer shall purchase and receive from Seller, all right, title and interest in and to the Environmental Attributes associated with Delivered Energy, whether now existing or subsequently created by a Governmental Authority after the Execution Date. Seller shall, at its sole expense, take all actions and execute all documents or instruments necessary to transfer all rights, title, and interest in and to the Environmental Attributes, whether now existing or that come into existence in the future, associated with the Delivered Energy. Seller shall transfer and make such Environmental Attributes available to Buyer as soon as practicable upon Seller's production of the Environmental Attributes.
- (b) Buyer's Right to Report Ownership of Environmental Attributes. Seller shall not report to any Person or entity that the Environmental Attributes belong to anyone other than Buyer, and Buyer may report under any program that such Environmental Attributes purchased hereunder belong to it.
- (c) Renewable Energy Credits. Seller shall, at its sole expense take all actions and execute all documents or instruments necessary to ensure that all WREGIS Certificates associated with all Renewable Energy Credits corresponding to all Delivered Energy are issued and tracked for purposes of satisfying the applicable requirements of the California RPS and transferred within three (3) months of creation to Buyer for Buyer's sole benefit. Seller shall comply with all Applicable Laws, including, without limitation, the WREGIS Operating Rules, regarding the certification and transfer of such WREGIS Certificates to Buyer.
  - (i) Seller shall cause REC transfers to occur on a monthly basis in accordance with the certification procedure established by the WREGIS Operating Rules. Any fractional MWh amounts shall be carried forward until sufficient generation is accumulated for the creation of a WREGIS Certificate.
  - (ii) Due to the delay in the creation of WREGIS Certificates relative to the timing of the monthly invoice payment under this Agreement, Buyer may make an invoice payment for a given month before the WREGIS Certificates for such month are formally transferred to Buyer in accordance with the WREGIS Operating Rules. Notwithstanding this delay, Buyer shall have all right and title to all such WREGIS Certificates upon payment to Seller.
  - (iii) Seller shall, at its sole expense, ensure that the WREGIS Certificates for a given calendar month correspond with the Delivered Energy for such calendar month. If any WREGIS Certificate Deficit is caused by, or the result of any action or inaction, by Seller, then the amount of Delivered Energy in such calendar Month ("the Deficient Month") shall be reduced by the amount of the WREGIS Certificate Deficit for the purposes of calculating Buyer's payment(s) to Seller under Article 4 and the Guaranteed Energy Production for the applicable GEP Period. Any amount owed by Seller to Buyer because of a WREGIS Certificate Deficit shall be made as an adjustment to Seller's next monthly invoice to Buyer in accordance with Article 4, and Buyer shall net such amount against Buyer's subsequent payment(s) to Seller.
  - (iv) Without limiting Seller's obligations, to the extent a WREGIS Certificate Deficit is caused by an error or omission of WREGIS, the Parties shall cooperate in good faith to cause WREGIS to correct its error or omission.

- (v) If WREGIS changes the WREGIS Operating Rules after the Execution Date or applies the WREGIS Operating Rules in a manner inconsistent with this Agreement, the Parties promptly shall modify this Agreement as reasonably required (i) to cause and enable Seller to transfer to Buyer's WREGIS Account a quantity of WREGIS Certificates for each given calendar month that corresponds to the Delivered Energy in the same calendar month, or (ii) as may otherwise be reasonably appropriate to address such inconsistency.

### 3.6 Resource Adequacy.

- (a) Resource Adequacy Requirements. During the Delivery Term, Seller grants, pledges, assigns and otherwise commits to Buyer all of the Facility's Capacity Attributes, to enable Buyer to meet its Resource Adequacy or successor program requirements, as the CPUC, CAISO and/or other regional entity may prescribe, including submission of a supply plan or Resource Adequacy plan. From the Execution Date, and for the duration of the Delivery Term, Seller shall take all commercially reasonable actions, including complying with all applicable registration and reporting requirements, and executing any and all documents or instruments necessary to enable Buyer to use all of the Capacity Attributes, to be committed by Seller to Buyer pursuant to this Agreement to meet Buyer's Resource Adequacy requirements during the Delivery Term.
- (b) Availability Standards. Seller shall be responsible for all costs, charges, expenses, penalties, and obligations resulting from Availability Standards, if applicable, and Seller shall be entitled to retain all credits, payments, and revenues, if any, resulting from Seller achieving or exceeding Availability Standards, if applicable.

### 3.7 Compliance Cost Cap. If Seller establishes to Buyer's reasonable satisfaction that a change in Applicable Law has occurred after the Effective Date that results in Compliance Costs as defined in Section 3.7(a), then Seller's Compliance Costs during the Delivery Term shall be capped annually at five thousand dollars (\$5,000.00) per MW of Contract Capacity and in the aggregate throughout the Delivery Term at twenty thousand dollars (\$20,000.00) per MW of Contract Capacity (collectively "Compliance Cost Cap").

- (a) This Section shall apply to Seller's additional, reasonable out-of-pocket costs paid to third parties for obtaining, maintaining, conveying, or complying with: (i) CEC Certification, (ii) Environmental Attributes including WREGIS certificates, and (iii) Capacity Attributes ("Compliance Costs"). Compliance Costs includes only those new costs associated with the change in Applicable Law after the Execution Date that are in excess of the reasonably anticipated compliance costs as of the Execution Date.
- (b) In the event that the Compliance Costs exceed the Compliance Cost Cap, Buyer shall either reimburse Seller for such Compliance Costs that exceed the Compliance Cost Cap, or excuse Seller from performing those obligations that cause the Compliance Costs to exceed the Compliance Cost Cap.
- (c) Seller shall notify Buyer within sixty (60) calendar days after the applicable Change in Law if it anticipates that its Compliance Costs will exceed the Compliance Cost Cap and an estimate of the Compliance Costs. Buyer shall notify Seller within thirty (30) calendar days of receipt of the notice whether Buyer (i) agrees to reimburse Seller for the additional costs, or (ii) waives Seller's performance of such obligations.

### 3.8 Tax Credits and Incentives. Buyer acknowledges and agrees that all tax credits, deductions, and incentives related to the generation and sale of Energy or investments in the Facility shall be owned by Seller, including tax credits available under Section 45 of Subtitle A, Chapter 1A, Part IV and Section 48(a)(3)(A)(i) and 48(a)(5) of the Internal Revenue Code of 1986 or any successor law. Buyer agrees to cooperate with Seller, as may be necessary, to allow maximization of the value of, and realization of, all such tax credits and incentives; provided that Buyer shall not be required to incur additional costs or accept any diminution in value of its rights under this Agreement or of the Product purchased hereunder.

In addition, Buyer shall not take any action (except as otherwise permitted under this Agreement), that would in any way reduce or eliminate the availability to Seller of any such tax credits and incentives. Notwithstanding the foregoing, Seller's rights under this section shall not include anything that qualifies as Product (including any Environmental Attributes).

### 3.9 Expansion Facility and Expansion Facility Product.

- (a) Buyer's Right of First Refusal. During the Term, Seller may, at its sole discretion, develop, finance, construct, and/or operate an Expansion Facility. Each time such a determination is made, Seller shall notify Buyer of such determination and shall offer, in writing, to sell the Expansion Facility Product to Buyer. The offer shall include the price to be paid by Buyer for the Expansion Facility Product, the term, and other principal terms and conditions of the proposed sale. If Buyer wishes to accept such offer to purchase all (but not less than all) of the Expansion Facility Product, Buyer shall so notify Seller within ninety (90) calendar days of its receipt of such offer. Buyer and Seller shall promptly thereafter enter into good faith negotiation of commercial modifications to this Agreement incorporating such Expansion Facility Product offer.
- (b) Buyer's Right to Purchase Expansion Facility Product. If Buyer does not accept Seller's offer to purchase the Expansion Facility Product within ninety (90) calendar days of receipt of Seller's offer, Seller shall be deemed authorized to offer to sell that portion of the Expansion Facility Product to one or more third parties at a price and on other terms and conditions which, taken as a whole, are at least as favorable to Seller as the price and other terms and conditions set forth in Seller's offer to Buyer. If Seller offers to disaggregate the Expansion Facility Product for the purpose of selling the same to multiple independent buyers, Seller shall notify Buyer, in writing, of the terms and conditions of such offers, and Buyer shall again have the right of first refusal consistent with the terms set forth above for each of the lesser amounts being offered to the third parties. If Buyer does not purchase the Expansion Facility Product and Seller sells such Expansion Facility Product to a third party, Seller shall promptly certify, in writing, to Buyer that the terms and conditions of sale of such Expansion Facility Product to such third party, taken as a whole, are at least as favorable to Seller as the price and other terms and conditions set forth in Seller's offer to Buyer, and, Seller shall provide the relevant final contract and any other supporting documentation for such certification by Buyer. Upon the sale of such Expansion Facility Product in compliance with this Agreement, Buyer shall have no further rights to be offered or to purchase such Expansion Facility Product. Buyer's refusal, in writing, of the Expansion Facility Product from one Expansion Facility shall not affect Buyer's right to purchase the Expansion Facility Product from a subsequently developed Expansion Facility under the terms of this Agreement. Notwithstanding any provision to the contrary herein, Seller shall not sell or provide the Expansion Facility Product to any third party, unless Seller can do so without compromising in any material way its ability to provide the Product or Expansion Facility Product, if any, to Buyer hereunder. The materiality of any such impact shall be determined by Buyer, acting in its reasonable discretion.

**3.10 Refurbishment of the Facility.** During the Term, Seller may not refurbish the Facility, alter components of the Facility, replace components of the Facility, add additional **[solar modules or inverters, or replace solar modules or inverters with more powerful solar modules or inverters]**, to increase capacity higher than the Installed Capacity without the prior written consent of Buyer, and Buyer shall have the right, in its sole discretion, to accept or decline to permit any such refurbishment or alteration that may increase capacity of the Facility above the Installed Capacity.

## ARTICLE 4: BILLING, PAYMENT, AND CERTIFICATION

### 4.1 Billing and Payment.

- (a) Monthly Invoices. Seller shall provide to Buyer no sooner than the tenth (10<sup>th</sup>) day of each month an invoice for the Product and Buyer Curtailed Product for the prior month based upon meter data for Energy delivered in such calendar month. All Energy purchased under this Agreement must be measured by the Facility's CAISO revenue meter to be eligible for payment under this Agreement. The invoice shall include:
- (i) the hourly quantities of Energy delivered in the prior month based on CAISO metering and settlement data ("Delivered Energy");
  - (ii) a calculation of the amount of Buyer Curtailed Product, if any;
  - (iii) the quantity of Capacity Attributes produced in the prior month;
  - (iv) a calculation of the monthly payment based on the Contract Price and the Excess Energy Price, and the quantity of Delivered Energy and Buyer Curtailed Product, if any,
  - (v) credits for WREGIS Certificate Deficits pursuant to Section 3.5 (c)(iii), if any, and;
  - (vi) amounts of Surplus Energy and the LMP at the Delivery Point.
- (b) Payment. All invoices shall be due and payable on or before the thirtieth (30<sup>th</sup>) day after receipt of the invoice or, if such day is not a Business Day, then on the next Business Day ("Due Date"). Any amount not paid by the Due Date shall be considered late and Buyer shall pay a Late Payment Penalty equal to a daily rate of five dollars and fifty cents (\$5.50) per one hundred thousand dollars (\$100,000) on the unpaid balance for a maximum period of ninety (90) days after the Due Date ("Late Payment Penalty").
- (c) City Vendor Requirements. Notwithstanding any other provision of this Agreement, Buyer shall not be deemed to be in default of this Agreement and no Late Payment Penalty shall be assessed if an invoice under this Agreement cannot be processed by Buyer due to Seller's failure to comply with all applicable City requirements for City contractors, including but not limited to certification of vendors under Chapter 12 of the San Francisco Administrative Code, payment of business license fees or taxes, insurance requirements, registration in the City's vendor payment processing system, or any other current or future City requirement for vendor payment processing. Seller understands and acknowledges that vendor certifications may include annual renewals and additional certification requirements may apply to assignees or changes in ownership or control of Seller.
- (d) Disputes and Adjustments of Invoices. A Party may, in good faith, dispute the correctness of any invoice or any adjustment to an invoice, rendered under this Agreement or adjust any invoice for any arithmetic or computational error within twelve (12) months of the date the invoice, or adjustment to an invoice, was rendered. In the event an invoice or portion thereof, or any other claim or adjustment arising hereunder, is disputed, payment of the undisputed portion of the invoice shall be required to be made when due, with notice of the objection given to the other Party. Any invoice dispute or invoice adjustment shall be in writing and shall state the basis for the dispute or adjustment. Payment of the disputed amount shall not be required until the dispute is resolved. Upon resolution of the dispute, any required payment shall be made within five (5) Business Days of such resolution along the Late Payment Penalty from and including the due date to but excluding the date paid. Inadvertent



overpayments shall be returned upon request or deducted by the Buyer from subsequent payments. Any dispute with respect to an invoice is waived unless the other Party is notified in accordance with this Section 4.1(d) within twelve (12) months after the invoice is rendered or any specific adjustment to the invoice is made. If an invoice is not rendered within twelve (12) months after the close of the month during which delivery of Product occurred, the right to payment for such delivery is waived.

- (e) CAISO Adjustments. If the CAISO makes any adjustment to any CAISO meter data for a given time period, Seller agrees that it shall submit revised monthly invoices, pursuant to Section 4.1, covering the entire applicable time period in order to conform fully such adjustments to the meter data. Seller shall submit any such revised invoice no later than thirty (30) days from the date on which the CAISO provides to Seller such binding adjustment to the meter data.

#### 4.2 Designated Fund.

- (a) Auto-Appropriating Designated Fund. Buyer's payment obligations under this Agreement shall be paid from a SFPUC designated fund that will automatically appropriate CleanPowerSF revenues on an annual basis without further Buyer action and which shall be used solely for CleanPowerSF costs and expenses, including the obligations under this Agreement. Buyer agrees to establish CleanPowerSF rates and charges that are sufficient to maintain revenues necessary to pay its obligations under this Agreement and all of Buyer's payment obligations under its other contracts for the purchase of energy for CleanPowerSF. Buyer shall provide Seller with reasonable access to account balance information with respect to the SFPUC designated fund at all times during the Delivery Term.
- (b) Limited Obligations. Buyer's payment obligations are special limited obligations of the Buyer payable solely from the revenues of CleanPowerSF. Buyer's payment obligations under this Agreement are not a charge upon the revenues or general fund of the SFPUC or the City and County of San Francisco or upon any non-CleanPowerSF moneys or other property of the SFPUC or the City.

#### 4.3 Guaranteed Maximum Costs.

- (a) Controller Certification. The Buyer's obligations hereunder shall not at any time exceed the amount certified by the Controller for the purpose and period stated in such certification. Except as may be provided by laws governing emergency procedures, officers and employees of Buyer are not authorized to request, and Buyer is not required to reimburse Seller for, commodities or services beyond the agreed upon Agreement scope unless the changed scope is authorized by amendment and approved as required by law. Officers and employees of Buyer are not authorized to offer or promise, nor is Buyer required to honor, any offered or promised additional funding in excess of the maximum amount of funding for which the contract is certified without certification of the additional amount by the Controller. The Controller is not authorized to make payments on any contract for which funds have not been certified as available in the budget or by supplemental appropriation.
- (b) Biannual Budget Process. For each City biannual budget cycle during the term of this Agreement, Buyer agrees to take all necessary action to include the maximum amount of the Buyer's payment obligations under this Agreement in its budget submitted to the Board of Supervisors for that budget cycle.

## ARTICLE 5: FACILITY OPERATION AND MAINTENANCE

### 5.1 General Obligations.

- (a) Records. Seller shall keep complete and accurate operating and other records and all other data for the purposes of proper administration of this Agreement, including such records as may be required by any Governmental Authority or Good Utility Practice;
- (b) CAISO Agreements. Seller shall enter into any agreements with the CAISO required by the CAISO for generators delivering power into the CAISO-controlled grid;
- (c) Insurance. Seller shall obtain and maintain the policies of insurance in the amounts and with the coverages as set forth on Exhibit D.
- (d) Vendor Certification. Seller shall obtain, renew, and maintain, all City required vendor certifications and requirements.
- (e) Compliance with Laws. Seek, obtain, maintain, and comply with all laws, Permits, certificates, agreements, or other authorizations or approvals, which are required for the ownership, construction, operation and maintenance of the Facility and the delivery and sale of the Product pursuant to this Agreement.
- (f) RPS Certification. Prior to the Effective Date and throughout the Delivery Term, take all actions necessary to obtain and maintain for the Facility (i) CEC Certification, and (ii) tracking and transfer of RECs associated with the Product in WREGIS.
- (g) Battery Storage. At the request of Buyer at any time during the Term, Seller shall in good faith evaluate and consider proposals for adding a battery storage unit(s) to the Facility, provided that Seller shall not be required to add any such storage unit(s) to the Facility unless and until Seller, Buyer and any Lenders each (in their sole and absolute discretion) approves the technical details of such unit(s) and appropriate amendments to this Agreement related to such unit(s), including additional compensation related to such unit(s).

### 5.2 Operation and Maintenance.

- (a) Operation and Maintenance. Seller shall be solely responsible for the ownership, operation, maintenance, and repair of the Facility in accordance with this Agreement, all Applicable Laws, the requirements of the CAISO, NERC and WECC, all applicable contractual obligations and Permits, and in accordance with Good Utility Practice, and shall be solely responsible for all associated costs and expenses. In the event Seller requires any data or information from Buyer in order to comply with any Applicable Law, including the requirements of CAISO, NERC and WECC, relating to the Facility, then Seller shall request in writing such data from Buyer no less than forty-five (45) calendar days prior to Seller's requested date of Buyer's response; provided that if Seller has less than forty-five (45) calendar days prior notice of the need for such data, Seller shall request in writing such data from Buyer as soon as reasonably practicable. Buyer shall make a good faith effort to provide such data and/or information within the timeframe specified in writing by Seller or as soon thereafter as reasonably practicable.
- (b) CAISO and WECC Requirements and Good Utility Practice. Each Party shall perform in compliance with all applicable (i) operating policies, criteria, rules, guidelines, tariffs, and protocols of the CAISO, (ii) WECC scheduling practices, and (iii) Good Utility Practice.
- (c) Start-ups and Shut-downs. Seller shall coordinate all Facility start-ups and shut-downs, in whole or in part, with Buyer in accordance with CAISO scheduling protocols and the reasonable protocols established by Buyer that are not inconsistent with the CAISO Tariff and CAISO procedures.
- (d) CAISO Charges. Seller shall do all things reasonably needed to allow Buyer to comply

with any obligations, and minimize any potential liability, under the CAISO Tariff. If and to the extent that Seller fails to comply with the notice provisions in Section 5.6(g) concerning Forced Outages or with its obligations as outlined in the previous sentence, Seller shall be wholly responsible for all imbalances, deviations, or any other CAISO charges or penalties associated with such Forced Outage or related CAISO Tariff obligation.

- (e) Metering. All Energy from the Facility must be delivered through a single CAISO revenue meter dedicated solely to the Facility. Seller shall bear all costs relating to all metering equipment installed to accommodate the Facility. In addition, Seller hereby agrees to provide all meter data to Buyer in a form acceptable to Buyer, and consents to Buyer obtaining from the CAISO all inspection, testing and calibration data and reports. Seller shall grant Buyer the right to retrieve the meter reads from CAISO Operational Meter Analysis and Reporting (OMAR), or its successor MRI-S, via website and direct download, and directly from the CAISO meter(s) at the Facility site.

### 5.3 Scheduling, Forecasts, and Outages.

- (a) Scheduling. Seller shall provide (or cause to be provided) all Scheduling Coordinator services for the Facility and for delivery of Product to the Delivery Point. Buyer shall provide (or cause to be provided) all Scheduling Coordinator services for Product at and from the Delivery Point. The Parties will purchase and sell Product through Inter-SC Trades in compliance with the CAISO Tariff.
- (b) CAISO Costs and Revenues. Seller shall be responsible for all CAISO costs (including penalties and other charges) and shall be entitled to all CAISO revenues (including credits and other payments) associated with the Facility and delivery of Product to the Delivery Point; provided, that, any costs or charges assessed by the CAISO which are not due to the Seller's generation, operation or dispatch of the Facility or delivery of Product to the Delivery Point, including costs and charges characterized by the Buyer's CAISO Charge Codes, shall be Buyer's responsibility. In addition, if during the Delivery Term, the CAISO implements or has implemented any sanction or penalty related to scheduling, outage reporting, or generator operation, the cost of the sanctions or penalties shall be the Seller's responsibility.
- (c) Variable or Intermittent Energy Resource Programs. During the Term, Seller may elect to participate in any CAISO program for scheduling variable or intermittent energy resources at its sole cost and discretion to the extent that such participation is consistent with Seller's obligations under this Agreement and the CAISO Tariff.
- (d) Scheduled and Delivered Amounts. (TBD)
- (e) Generation Forecasts.
  - (i) No later than thirty (30) days prior to the end of each Contract Year, Seller will provide a forecast of available capacity and production ("Annual Forecast") detailing hourly expected available generation and monthly capacity and all proposed Planned Outages for the next Contract Year in accordance with Exhibit M. During the Delivery Term of this Agreement, Seller shall not schedule Planned Outages of more than twenty-four (24) hours during the period of reliability accounting (initially the period between June 1<sup>st</sup> and September 30<sup>th</sup> but subject to changes at Buyer's discretion in order to conform to the CAISO's availability assessment).
  - (ii) No later than ten (10) days prior to the first day of each month of the Delivery Term, Seller shall provide an electronic update, in a format specified by Buyer, to the Annual Forecast for that calendar month ("Monthly Forecast"). The Monthly Forecast shall include hourly available capacity and expected generation and all Planned Outages.

- (iii) No later than seven (7) days prior to the first day of each week of the Delivery Term, Seller shall provide a weekly forecast of available capacity and production and any changes in Planned Outages (“Weekly Forecast”). The Weekly Forecast shall include hourly available capacity and generation and all Planned Outages.
- (iv) In the Annual and Monthly Forecasts, Seller shall provide, at a minimum, the information set forth in Exhibit M. Planned Outages not included in the Annual or Monthly Forecast shall be provided by Seller to Buyer at least ten (10) Business Days prior to the start of the Planned Outage.
- (f) Planned Outages. If Buyer requests a change to the scheduled date of any Planned Outage, Seller shall consider such request in good faith and notify Buyer of its decision within seven (7) calendar days of receipt of Buyer’s request.
- (g) Forced Outages. Forced Outages shall be reported by Seller to Buyer verbally as soon as practicable and in writing in accordance with Exhibit M. Seller shall notify Buyer immediately, and in no event later than within ten (10) minutes, whenever the Facility is returned to service.
- (h) Curtailement.
  - (i) Mandatory Curtailement Periods. Seller shall reduce delivery amounts as directed by the CAISO, PTO, or any successor thereof pursuant to a Curtailement Order. Buyer shall not be required to pay Seller for the Product that Seller could have delivered to Buyer but for such Curtailement Order.
  - (ii) Discretionary Curtailement.
    - (A) Buyer may require Seller to curtail deliveries of Product from the Facility for any reason in Buyer’s sole discretion (a “Discretionary Curtailement”) by delivering a dispatch notice to Seller in accordance with Exhibit M, provided that (1) such Discretionary Curtailements shall be limited to a quantity of not more than ten percent (10%) of the Contract Quantity in each Contract Year. Seller shall reduce the Facility’s Product delivery by the amount and for the period set forth in each dispatch notice.
    - (B) In addition to paying Seller for all Delivered Energy hereunder, Buyer shall pay Seller the Contract Price for the amount of Product that Seller could reasonably have delivered to Buyer but for such Discretionary Curtailement (“Buyer Curtailed Product”).
  - (iii) Failure to Comply. If Seller fails to comply with a dispatch notice that meets the requirements for a Discretionary Curtailement, for the amount of Product (measured in MWhs of Product) that the Facility delivered in contradiction to the dispatch notice, Seller shall pay Buyer the greater of:
    - (A) Two hundred percent (200%) of the Contract Price for such MWhs plus any penalties or other charges actually incurred resulting from Seller’s failure to comply with the dispatch notice; and
    - (B) the CAISO’s Real-Time Market price for the applicable PNode for such MWhs plus any penalties or other charges actually incurred resulting from Seller’s failure to comply with the dispatch notice.

The Parties agree that, consistent with Section 9.3(b), the damages Buyer would incur due to Seller’s failure to comply with a Discretionary Curtailement would be difficult or impossible to predict with certainty and the liquidated damages set forth in this Section are a reasonable approximation of such damages.

- (iv) If Seller does not provide payment to Buyer within ten (10) days of Seller's receipt of an invoice from Buyer for the damages set forth in Section 5.6(h)(iii), at Buyer's sole discretion, Buyer shall be entitled to collect damages by one or more of the following:
  - (A) drawing upon the Performance Assurance;
  - (C) setting off against any amounts owed to Seller by Buyer under this Agreement.

## ARTICLE 6: DEVELOPMENT AND PERFORMANCE ASSURANCE

**6.1 Grant of Security Interest/Remedies.** To secure its obligations under this Agreement hereunder, Seller hereby grants to Buyer, as the secured party, a first priority security interest in, and lien on (and right of setoff against), and assignment of, all such Performance Assurance posted with Buyer in the form of cash collateral or cash equivalent collateral and any and all proceeds resulting therefrom or the liquidation thereof, whether now or hereafter held by, on behalf of, or for the benefit of, Buyer. Within thirty (30) calendar days of the delivery of the Performance Assurance, as applicable, Seller agrees to take such action as Buyer reasonably requires in order to perfect a first-priority security interest in, and lien on (and right of setoff against), such Performance Assurance and any and all proceeds resulting therefrom or from the liquidation thereof, respectively. Upon or any time after the occurrence or deemed occurrence and during the continuation of an Event of Default or an Early Termination Date, Buyer, as the Non-Defaulting Party, may do any one or more of the following:

- (a) exercise any of the rights and remedies of a secured party with respect to all Performance Assurance, as applicable, including any such rights and remedies under the law then in effect;
- (b) draw on any outstanding Letter of Credit or Guaranty issued for its benefit and retain any cash held by Buyer as Performance Assurance; and
- (c) liquidate all Performance Assurance, as applicable, then held by or for the benefit of Buyer free from any claim or right of any nature whatsoever of Seller, including any equity or right of purchase or redemption by Seller.

Buyer shall apply the proceeds of the collateral realized upon the exercise of any such rights or remedies to reduce Seller's obligations under the Agreement (Seller remaining liable for any amounts owing to Buyer after such application), subject to the Buyer's obligation to return any surplus proceeds remaining after such obligations are satisfied in full.

### 6.2 Performance Assurance.

- (a) Provision of Security by Seller. Seller agrees to deliver to Buyer collateral to secure its obligations under this Agreement which Seller shall maintain in full force and effect for the period posted with Buyer in the amount of five percent (5%) of the total Project revenue under this Agreement in the form of cash, a Letter of Credit, or a Guaranty from the Commercial Operation Date and ending at the expiration of the Delivery Term. The amount of the Performance Assurance shall adjust annually to reflect the remaining value of the Agreement.
- (b) No Limitation of Damages. The amount of Performance Assurance required under this Agreement shall not be deemed a limitation of damages.
- (d) Use of Performance Assurance. Buyer shall be entitled to draw upon the Performance Assurance posted by Seller for any reason permitted under this Agreement, including Buyer's declaration of an Early Termination Date.
- (e) Return of Performance Assurance. Buyer shall return the unused portion of Performance Assurance to Seller within thirty (30) days after the following has

occurred: (i) the Agreement Term of the Agreement has ended, or an Early Termination Date has occurred; and (ii) all payment obligations of the Seller arising under this Agreement, including payments pursuant to a Termination Payment, indemnification payments, or other damages are paid in full (whether directly or indirectly such as through set-off or netting).

**6.3 Letter of Credit.** Performance Assurance provided in the form of a Letter of Credit shall be substantially in the form set forth in Exhibit F-1 subject to the following provisions:

- (a) Renewal of Letter of Credit. If Seller has provided a Letter of Credit pursuant to any of the applicable provisions in this Article 6, then Seller shall renew or cause the renewal of each outstanding Letter of Credit on a timely basis in accordance with this Agreement.
- (b) Failure of Letter of Credit and Cure. In the event the issuer of such Letter of Credit at any time: fails to maintain the requirements of an Eligible LC Bank or Letter of Credit, becomes Bankrupt, indicates its intent not to renew such Letter of Credit, or fails to honor Buyer's properly documented request to draw on such Letter of Credit, Seller shall cure such occurrence by complying with either (i) or (ii) below in an amount equal to the outstanding Letter of Credit, and by completing the action within five (5) Business Days after the date of Buyer's notice to Seller of an occurrence listed in this subsection (Seller's compliance with either (i) or (ii) below is considered the "Cure"):
  - (i) providing a substitute Letter of Credit that is issued by an Eligible LC Bank other than the bank which is the subject of Buyer's notice to Seller in this section 6.3(b),
  - (ii) providing a Guaranty, or
  - (iii) posting cash.
- (c) Failure to Cure. If Seller fails to cure or if such Letter of Credit expires or terminates without a full draw thereon by Buyer, or fails or ceases to be in full force and effect at any time that such Letter of Credit is required pursuant to the terms of this Agreement, then Seller shall have failed to meet the collateral requirements of Section 6.2 and Buyer may declare an Event of Default as set forth in Article 9.
- (d) Letter of Credit Costs. In all cases, the reasonable costs and expenses of establishing, renewing, substituting, canceling, increasing, reducing, or otherwise administering the Letter of Credit shall be borne by Seller.

**6.4 Guaranty.** If at any time Seller's Guarantor or Guaranty is no longer acceptable to Buyer, in its reasonable discretion, Seller shall replace the Guaranty within five (5) Business Days following Buyer's written request for replacement of the Guaranty. Seller shall provide for the benefit of Buyer either (1) cash, (2) a replacement Guaranty from a different Guarantor meeting the criteria set forth in the definition of Guarantor, or (3) a replacement Letter of Credit from an issuer meeting the criteria set forth in the definition of Letter of Credit. If Seller fails to provide replacement Development or Performance Assurance as required in this Section 6.4, then Buyer may declare an Event of Default as set forth in Article 9.

## ARTICLE 7: FINANCIAL STATEMENTS

**7.1 Seller's Obligations.** If requested by Buyer, Seller shall deliver to Buyer (i) within six (6) months following the end of each fiscal year, a copy of Seller's and Seller's Parent's annual report containing audited consolidated financial statements for such fiscal year (or if not available, unaudited consolidated financial statements for such fiscal year) and (ii) within forty-five (45) calendar days after the end of each of its first three (3) fiscal quarters of each fiscal year, a copy of Seller's and Seller's Parent's quarterly report containing unaudited consolidated financial statements for such fiscal quarter.

In all cases, the statements shall be for the most recent accounting period and shall be prepared in accordance with GAAP and shall be certified by the Chief Financial Officer or equivalent officer of Seller on behalf of Seller and of Seller's Parent on behalf of Seller's Parent; provided, however, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not constitute an Event of Default so long as Seller diligently pursues the preparation, certification and delivery of the statements.

**7.2 Buyer's Obligations.** If requested by Seller, Buyer shall deliver to Seller (i) within six (6) months following the end of each fiscal year, a copy of Buyer's annual report containing audited consolidated financial statements for such fiscal year (or if not available, unaudited consolidated financial statements for such fiscal year) and (ii) within forty-five (45) calendar days after the end of each of its first three (3) fiscal quarters of each fiscal year, a copy of Buyer's quarterly report containing unaudited consolidated financial statements for such fiscal quarter. In all cases, the statements shall be for the most recent accounting period and shall be prepared in accordance with GAAP, provided, however, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not constitute an Event of Default so long as Buyer diligently pursues the preparation, certification and delivery of the statements.

## ARTICLE 8: FORCE MAJEURE

**8.1 Remedial Action.** A Party shall not be liable to the other Party if the Party is prevented from performing its obligations hereunder due to a Force Majeure Event. The Party rendered unable to fulfill an obligation by reason of a Force Majeure Event shall take all action necessary to remove such inability with all due speed and diligence. The non-performing Party shall be prompt and diligent in attempting to mitigate the effects of and to remove the cause of its failure to perform, and nothing herein shall be construed as permitting that Party to continue to fail to perform after said cause has been removed. Notwithstanding the foregoing, the existence of a Force Majeure Event shall not excuse any Party from its obligations to make payment of amounts due hereunder.

**8.2 Notice.** In the event of any delay or nonperformance resulting from a Force Majeure Event, the Party suffering the Force Majeure Event shall, as soon as practicable under the circumstances, notify the other Party, in writing, of the nature, cause, date of commencement, and the anticipated extent of any delay or interruption in performance.

**8.3 Termination Due To Force Majeure Event.** If a Party is prevented in any material respect from performing any material obligations under this Agreement solely due to a Force Majeure Event lasting for a period of twelve (12) consecutive months or longer, the unaffected Party may terminate this Agreement, without liability of either Party to the other, upon thirty (30) calendar days' prior written notice at any time following expiration of such period of twelve (12) consecutive months. In such event, Buyer shall promptly return to Seller all Development Assurance or Performance Assurance, as applicable, less any amount paid by or due and payable by Seller pursuant to Sections 3.4(c) or 5.3(h) prior to the date of such termination for reasons unrelated to this Section 8.3. This Section 8.3 shall not affect the rights and remedies associated with any other termination rights set forth in this Agreement.

## ARTICLE 9: DEFAULT, REMEDIES, AND TERMINATION

### 9.1 Events of Default.

- (a) The occurrence of any of the following shall constitute an Event of Default by a Party:
  - (i) the breach of any material obligation or covenant of this Agreement and such Party fails to cure such breach within thirty (30) calendar days after written notification of default by the other Party; however, the Parties may mutually

agree upon a longer period for cure if the Event of Default cannot reasonably be cured within thirty (30) calendar days;

- (ii) subject to Section 4.1(c), failure to make any payment when due under this Agreement within ten (10) Business Days after written notice that such payment is due;
  - (iii) Any representation or warranty made by such Party herein is false or misleading in any material respect when made or when deemed made or repeated, and is not cured or remedied within thirty (30) days after written notice;
  - (iv) such Party becomes Bankrupt;
  - (v) subject to Section 12.1(c), such Party consolidates or amalgamates with, or merges with or into, or transfers all or substantially all of its assets to, another entity and, at the time of such consolidation, amalgamation, merger or transfer, the resulting, surviving or transferee entity fails to assume all the obligations of such Party under this Agreement to which it or its predecessor was a party by operation of law or pursuant to an agreement reasonably satisfactory to the other Party.
- (b) The following shall constitute additional Events of Default by Seller:
- (i) Notwithstanding any other provision of this Agreement, Seller fails for a consecutive twelve (12) month period to deliver at least fifty percent (50%) of the expected deliveries as set forth in the Annual Forecast excluding Seller Excused Hours;
  - (ii) Seller fails to satisfy any of the credit requirements of Article 6 of this Agreement.

## 9.2 Termination for Default.

- (a) Declaration of Early Termination Date. If an Event of Default with respect to a defaulting Party has occurred, is continuing and has not been cured, the other Party (the "Non-Defaulting Party") shall have the right to:
- (i) send notice, designating a day, no earlier than ten (10) calendar days after the day such notice is deemed to be received, as an Early Termination Date for this Agreement;
  - (ii) accelerate all amounts owing between the Parties, terminate this Agreement and end the Delivery Term effective as of the Early Termination Date;
  - (iii) collect as of the Early Termination Date, the Termination Payment (which shall be calculated in accordance with Section 9.2(b)) if any Event of Default by either Party arose after the Commercial Operation Date;
  - (iv) withhold any payments due to the Defaulting Party under this Agreement;
  - (v) suspend performance;
  - (vi) exercise its rights pursuant to Article 6 of this Agreement to draw upon and retain Development Assurance or Performance Assurance, as applicable; and
  - (vii) exercise any other right or remedy available at law or in equity to the extent otherwise permitted under this Agreement.
- (b) Calculation of Termination Payment.
- (i) The Non-Defaulting Party shall calculate, in a commercially reasonable manner, a Termination Payment as of the Early Termination Date. Third parties supplying information for purposes of the calculation of Gains or



Losses may include dealers in the relevant markets, end-users of relevant Product, information vendors and other sources of market information. The quotes obtained shall be: for a like amount of a like Product; at the same (or a reasonably equivalent) PNode, and; for the remainder of the Delivery Term, or in any other commercially reasonable manner.

- (ii) If the Non-Defaulting Party's aggregate Gains exceed its aggregate Losses and Costs, if any, resulting from such termination of this Agreement, the amount of the Termination Payment shall be zero.
  - (iii) The Non-Defaulting Party shall not have to enter into replacement transactions to establish a Termination Payment.
  - (iv) The Termination Payment shall be the sole and exclusive remedy available to the Non-Defaulting Party in connection with its termination of this Agreement and shall not include consequential, incidental, punitive, exemplary, indirect, or business interruption damages.
  - (v) Section 4.3 of this Agreement is not a limitation on Buyer's liability for a Termination Payment
- (c) Notice of Termination Payment. As soon as practicable after declaration of an Early Termination Date, the Non-Defaulting Party shall give notice to the Defaulting Party of the amount of the Termination Payment due from the Defaulting Party to the Non-Defaulting Party, if any. The notice shall include a written statement explaining in reasonable detail the calculation of such amount and the sources for such calculation. The Termination Payment shall be made to the Non-Defaulting Party fifteen (15) Business Days after such termination payment notice is effective.
- (d) Disputes Regarding Termination Payment. If the Defaulting Party disputes the Non-Defaulting Party's calculation of the Termination Payment, in whole or in part, the Defaulting Party shall, within fifteen (15) Business Days of receipt of the Non-Defaulting Party's calculation of the Termination Payment, provide to the Non-Defaulting Party a detailed written explanation of the basis for such dispute. Following delivery of such a notice, disputes regarding the Termination Payment shall be resolved in accordance with Section 10.8.

### 9.3 Limitation of Liability/Liquidated Damages.

- (a) **THERE IS NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ANY AND ALL IMPLIED WARRANTIES ARE DISCLAIMED.**
- (b) **THE PARTIES CONFIRM THAT THE EXPRESS REMEDIES AND MEASURES OF DAMAGES PROVIDED IN THIS AGREEMENT SATISFY THE ESSENTIAL PURPOSES HEREOF. FOR BREACH OF ANY PROVISION FOR WHICH AN EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED, SUCH EXPRESS REMEDY OR MEASURE OF DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY, THE OBLIGOR'S LIABILITY SHALL BE LIMITED AS SET FORTH IN SUCH PROVISION AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED, UNLESS THE PROVISION PROVIDES THAT THE EXPRESS REMEDIES ARE IN ADDITION TO OTHER REMEDIES THAT MAY BE AVAILABLE. IF NO REMEDY OR MEASURE OF DAMAGES IS EXPRESSLY PROVIDED HEREIN, THE OBLIGOR'S LIABILITY SHALL BE LIMITED TO DIRECT ACTUAL DAMAGES ONLY, SUCH DIRECT ACTUAL DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY AND ALL SUCH OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED UNLESS EXPRESSLY HEREIN PROVIDED. NEITHER PARTY**

SHALL BE LIABLE TO THE OTHER PARTY UNDER THIS AGREEMENT FOR ANY INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR CONSEQUENTIAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOSS OF USE, LOSS OF REVENUES, LOSS OF PROFIT, OR OTHER BUSINESS INTERRUPTION DAMAGES, INTEREST CHARGES, OR COST OF CAPITAL, BY STATUTE, IN TORT OR CONTRACT, UNDER ANY INDEMNITY PROVISION OR OTHERWISE; PROVIDED HOWEVER, NOTHING IN THIS SECTION SHALL AFFECT THE ENFORCEABILITY OF THE PROVISIONS OF THIS AGREEMENT RELATING TO EXPRESS REMEDIES OR MEASURE OF DAMAGES. THE PARTIES ACKNOWLEDGE AND AGREE THAT THE LIQUIDATED DAMAGES AND DAMAGE PAYMENTS SET FORTH IN SECTIONS 3.4(c), 5.3(h)(iii), AND 9.2(a)(iii) ARE EACH REASONABLE AND REPRESENT A FAIR AND GENUINE ESTIMATE OF THE DAMAGES THAT WOULD OCCUR RELATED TO THE EVENTS DESCRIBED THEREIN. THE PARTIES ACKNOWLEDGE AND AGREE THAT THE DAMAGES FOR THE CIRCUMSTANCES SET FORTH ABOVE WOULD BE IMPOSSIBLE OR DIFFICULT TO MEASURE, OR OTHERWISE OBTAINING AN ADEQUATE REMEDY IS IMPRACTICABLE. THE PARTIES FURTHER AGREE THAT PAYMENT OF SUCH AMOUNTS SHALL BE AS AND FOR LIQUIDATED DAMAGES AND NOT AS A PENALTY AND ARE THEREFORE NOT SUBJECT TO AVOIDANCE UNDER CALIFORNIA CIVIL CODE SECTION 1671.

- (c) BUYER'S PAYMENT OBLIGATIONS UNDER THIS AGREEMENT SHALL BE LIMITED TO THE PAYMENT OF THE COMPENSATION PROVIDED UNDER THIS AGREEMENT, INCLUDING, BUT NOT LIMITED TO, THE COMPENSATION PROVIDED FOR IN ARTICLES 3 AND 4, AND SECTION 9.2.
- (d) EXCEPT AS OTHERWISE PROVIDED HEREIN, THE RIGHTS AND REMEDIES OF A PARTY PURSUANT TO THIS ARTICLE 9 SHALL BE CUMULATIVE AND IN ADDITION TO THE RIGHTS OF THE PARTIES OTHERWISE PROVIDED IN THIS AGREEMENT.

## ARTICLE 10: INDEMNIFICATION

### 10.1 Indemnification.

- (a) Seller and Buyer Indemnification. Each Party ("Indemnifying Party") shall defend, indemnify and hold harmless the other Party and its elected officials, officers, directors, employees, agents, affiliates and representatives (each, an "Indemnified Party") from and against any and all losses, including but not limited to losses arising from personal injury or death, or damage to property, but only to the extent such losses result from or arise out of the negligence, willful misconduct or violation of Applicable Law by the Indemnifying Party.
- (b) Notice. If an Indemnified Party determines that it is entitled to defense and indemnification under this Section 10.1, such Indemnified Party shall promptly notify the Indemnifying Party in writing of the losses, and provide all reasonably necessary or useful information, and authority to settle and/or defend the losses. No settlement that would impose costs or expense upon the Indemnified Party shall be made without such Party's prior written consent.

**10.2 Debt Liability Disclaimer.** Buyer shall not be liable for and shall be held harmless and indemnified by Seller for (a) any claims or damages arising out of any other contract to which Seller is a party, and (b) subject to Section 10.1(a), any tortious action or inaction, negligent error in judgment, act of negligence, intentional tort, negligent mistakes or other acts taken or not taken by the Seller, its employees, agents, servants, invitees, guests or anyone acting in concert with or on behalf of the Seller.

## ARTICLE 11: REPRESENTATIONS AND WARRANTIES

**11.1 Seller's Representations and Warranties.** In addition to the representations and warranties set forth in other sections of this Agreement, Seller represents and warrants to Buyer that as of the Execution Date:

- (a) Seller is duly organized and validly existing as a \_\_\_\_\_ under the laws of \_\_\_\_\_, and has the lawful power to engage in the business it presently conducts and contemplates conducting in this Agreement, and Seller is duly qualified in California and each jurisdiction wherein the nature of the business transacted by it makes such qualification necessary;
- (b) Seller has the legal power and authority to make and carry out this Agreement and to perform all of its obligations hereunder and all such actions have been duly authorized by all necessary proceedings on its part;
- (d) The execution, delivery and performance of this Agreement by Seller shall not conflict with its governing documents, any Applicable Laws, or any covenant, agreement, understanding, decree or order to which Seller is a party or by which it is bound or affected;
- (e) This Agreement has been duly and validly executed and delivered by Seller and, as of the Execution Date, constitutes a legal, valid and binding obligation of Seller, enforceable in accordance with its terms against Seller, except to the extent that its enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the rights of creditors generally or by general principles of equity;
- (f) There are no actions, suits, proceedings or investigations pending or, to the knowledge of Seller, threatened, in writing, against Seller or any of its affiliates, at law or in equity, before any Governmental Authority, which individually or in the aggregate are reasonably likely to have a materially adverse effect on the business, properties or assets or the condition, financial or otherwise, of Seller, or to result in any impairment of Seller's ability to perform its obligations under this Agreement;
- (g) It is not Bankrupt and there are no proceedings pending or being contemplated by it or any of its affiliates, or, to its knowledge, threatened against it or its affiliates which would result in it being or becoming Bankrupt; and
- (h) It is a forward contract merchant within the meaning of the U.S. Bankruptcy Code (as in effect as of the Execution Date of this Agreement).

**11.2 Buyer Representations and Warranties.** Buyer represents and warrants to Seller that as of the Execution Date:

- (a) Buyer is a municipal corporation, duly organized and validly existing, and has the lawful power to engage in the business it presently conducts and contemplates conducting in this Agreement;
- (b) Buyer has the legal power and authority to make and carry out this Agreement and to perform its obligations hereunder and all such actions have been duly authorized by all necessary proceedings on its part;
- (c) The execution, delivery and performance of this Agreement by Buyer shall not conflict with its governing documents, any Applicable Laws or any covenant, agreement, understanding, decree or order to which Buyer is a party or by which it is bound or affected;

- (d) This Agreement has been duly and validly executed and delivered by Buyer and, as of the Execution Date, constitutes a legal, valid and binding obligation of Buyer, enforceable in accordance with its terms against Buyer, except to the extent that its enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the rights of creditors generally or by general principles of equity;
- (e) There are no actions, suits, proceedings or investigations pending or, to the knowledge of Buyer, threatened, in writing, against Buyer, at law or in equity, before any Governmental Authority, which individually or in the aggregate are reasonably likely to have a materially adverse effect on the business, properties or assets or the condition, financial or otherwise, of Buyer, or to result in any impairment of Buyer's ability to perform its obligations under this Agreement;
- (f) It is not Bankrupt and there are no proceedings pending or being contemplated by it or, to its knowledge, threatened against it which would result in it being or becoming Bankrupt; and
- (g) It is a forward contract merchant within the meaning of the U.S. Bankruptcy Code (as in effect as of the Execution Date of this Agreement).

### 11.3 Covenants.

- (a) General Covenants. In addition to other covenants in this Agreement, each Party covenants that throughout the Delivery Term:
  - (i) it shall continue to be duly organized, validly existing and in good standing under the Laws of the jurisdiction of its formation;
  - (ii) it shall maintain (or obtain from time to time as required, including through renewal, as applicable) all regulatory authorizations necessary for it to legally perform its obligations under this Agreement; and
  - (iii) it shall perform its obligations under this Agreement in a manner that does not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any Applicable Law.
- (b) Seller Covenant. Seller covenants that, throughout the Delivery Term:
  - (i) it shall maintain CEC Certification of the Facility; and
  - (ii) it shall ensure that the Renewable Energy Credits transferred to Buyer conform to the definition and attributes required for compliance with the California Renewables Portfolio Standard and as may be modified by subsequent decision of the CPUC or by subsequent legislation.

## ARTICLE 12: MISCELLANEOUS

### 12.1 Assignment

- (a) General Assignment. Except as provided in Sections 12.2(b) and (c), neither Party shall assign this Agreement or its rights hereunder without the prior written consent of the other Party, which consent shall not be unreasonably withheld, conditioned or delayed so long as among other things, (i) the assignee assumes the transferring Party's payment and performance obligations under this Agreement, (ii) the assignee agrees in writing to be bound by the terms and conditions hereof, (iii) the transferring Party delivers financial statements, information and other evidence satisfactory to the non-transferring Party of the proposed assignee's technical and financial capability to fulfill

the assigning Party's obligations hereunder, and (iv) the transferring Party delivers such tax and enforceability assurance as the other Party may reasonably request.

- (b) Assignment to Financing Providers. Notwithstanding any provision to the contrary in this Section 12.1, Buyer hereby consents to assignment of this Agreement by Seller as collateral for any financing or refinancing of the Facility Seller's obligations under this Agreement shall continue in their entirety in full force and effect. Promptly after granting such interest, Seller shall notify Buyer in writing of the name, address, and telephone and facsimile numbers of any Lender to which the Seller's interest under this Agreement has been assigned. The notice shall include the names of the Lender's primary contact(s) to whom all communications may be addressed. Seller shall promptly notify Buyer of any changes to the information contained in the notice. As a condition to Buyer's consent to assignment, the following provisions shall apply to any assignment under this Section 12.1(b):
- (i) Lender shall have the right, but not the obligation, to perform any act required to be performed by Seller under this Agreement to prevent or cure a default by the Seller and such act performed by Lender shall be as effective to prevent or cure a default as if done by Seller.
  - (ii) Buyer shall cooperate with Seller or a Lender to execute or arrange for the delivery of certificates, consents, opinions, estoppels, amendments and other documents reasonably requested by Seller or Lender in order to complete any financing or refinancing and shall enter into reasonable agreements with such Lender that provide for recognition of the Lender's security interest by Buyer and such other provisions as may be reasonably requested by Seller or any such Lender; provided, however, that all costs and expenses (including reasonable attorney's fees) incurred by Buyer in connection with an assignment of this Agreement to a Lender shall be borne by Seller.
  - (iii) In the event of a Default under this Agreement, Buyer shall provide a copy of the notice of Default to the Lender pursuant to Section 9.2(a) at the same time as the notice is provided to Seller. Buyer shall accept a cure performed by a Lender and shall negotiate in good faith with the Lender as to the cure period(s) allowed for the Lender to cure any Event of Default. Buyer shall accept a cure by Lender so long as the cure is accomplished within the applicable cure period. Notwithstanding any Lender cure, Seller shall not be released and discharged from, and shall remain liable for, any and all obligations to the Buyer arising or accruing hereunder.
  - (iv) If Lender, directly or indirectly, takes possession of, or title to the Facility (including possession by a receiver or title by foreclosure or deed in lieu of foreclosure), Lender must (i) assume all of Seller's obligations arising under this Agreement, and (ii) shall cure all defaults under this Agreement existing as of the date of change of title or control as required under this Agreement.
- (c) Assignment in Connection with a Change in Control. Notwithstanding any provision to the contrary in this Section 12.1, any direct or indirect change of control of Seller (whether voluntary or by operation of Law) shall not require the prior written consent of Buyer. Seller shall promptly notify Buyer of any direct or indirect change in control and shall provide any information reasonably requested by Buyer regarding the change in control. Seller acknowledges that its obligations under this Agreement remain in full force and effect notwithstanding such change in control and that Seller is solely responsible for all ensuring that required changes to its vendor certifications are promptly implemented.

- (d) Unauthorized Assignment. Any assignment or purported assignment in violation of this Section 12.1 is void.

## 12.2 Proprietary or Confidential Information.

- (a) Buyer Confidential Information. Seller understands and agrees that, in the performance of this Agreement or in contemplation thereof, Seller may have access to private or confidential information which may be owned or controlled by Buyer and that such information may contain proprietary or confidential details, the disclosure of which to third parties may be damaging to Buyer. Seller agrees that all private and confidential information disclosed by Buyer to Seller shall be held in confidence and used only in performance of the Agreement. Seller shall exercise the same standard of care to protect such information as a reasonably prudent person would use to protect its own proprietary data.
- (b) Public Records Act and Sunshine Ordinance. Seller acknowledges that Buyer is a public agency subject to the disclosure requirements of the Public Records Laws. If documents or information submitted to Buyer contain Seller's proprietary and confidential information and Seller claims that such information falls within one or more Public Records Laws exemptions, Seller must clearly mark such information "CONFIDENTIAL AND PROPRIETARY", and identify the specific lines containing such information (the "Confidential Information"). Buyer shall disclose such Confidential Information to third parties only to the extent required by California law (including, without limitation, the California Constitution, the Public Records Laws, and other Applicable Law).
- (c) Disclosure of Confidential Information by Buyer. In the event of a third party request for Buyer to disclose such Confidential Information, Buyer shall make reasonable efforts to provide notice to Seller prior to disclosure. If Seller contends that any Confidential Information is exempt from the Public Records Laws and wishes to prevent disclosure, Seller shall obtain a protective order, injunctive relief or other appropriate remedy from a court of law in San Francisco County before Buyer's deadline for responding to the disclosure request. If Seller fails to obtain such remedy prior to Buyer's deadline for responding to the request, Seller agrees that Buyer may disclose the requested Confidential Information. Seller further agrees that Buyer shall have no liability to Seller arising out of any disclosure by Buyer of any Seller Confidential Information before Seller has timely obtained an order, injunctive relief or other appropriate remedy to prevent Buyer from making the requested third party disclosure.
- (d) Non-Confidential Information. Notwithstanding anything to the contrary in this Section 12.2 nothing shall restrict any Party from using or disclosing information related to this Agreement, including Confidential Information if such information (i) is generally available to the public; (ii) was within the using or disclosing Party's possession prior to it being furnished hereunder, provided that such information is not subject to another confidentiality agreement with, or other contractual, legal or fiduciary obligation of confidentiality to, any other party with respect to such information; (iii) is rightfully obtained by a Party from third parties authorized to make such disclosure without restriction; (iv) is legally required to be disclosed by judicial or other governmental action as determined by such Party's attorney acting in good faith; or (v) is disclosed without a duty of confidentiality to a third party by, or with the authorization of, the disclosing Party; or (vi) is furnished to the non-disclosing Party's Affiliates, and to each of such person's auditors, attorneys, advisors or lenders which are required to keep the information that is disclosed in confidence.

- (e) Nondisclosure of Private Information. If this Agreement requires Buyer to disclose "Private Information" to Seller within the meaning of San Francisco Administrative Code Chapter 12M, Seller shall use such information only in accordance with the restrictions stated in Chapter 12M and in this Agreement and only as necessary in performing this Agreement. Seller is subject to the enforcement and penalty provisions in Chapter 12M.

### 12.3 **Dispute Resolution/Choice of Law.**

- (a) Negotiation; Dispute Resolution. The Parties will attempt in good faith to resolve any dispute or controversy arising out of or relating to the performance of this Agreement by negotiation. The status of any dispute or controversy notwithstanding, each Party shall proceed diligently with the performance of its obligations under this Agreement in accordance with and subject to the terms of this Agreement. If agreed by both Parties in writing, disputes may be resolved by a mutually agreed-upon alternative dispute resolution process. Neither Party will be entitled to legal fees or costs for matters resolved under this section.
- (b) Choice of Law and Venue. This Agreement and the rights and duties of the Parties hereunder shall be construed, enforced and performed in accordance with the laws of the state of California, and/or the laws of the United States, as applicable, without regard to principles of conflicts of law which may direct the application of the laws of another jurisdiction. Venue shall be in the County of San Francisco, State of California.

**12.4 Audit.** Each Party has the right, at its sole expense and during normal working hours, to examine the records of the other Party to the extent reasonably necessary to verify the accuracy of any statement, charge or computation made pursuant to this Agreement. The Parties shall maintain such data and records in an accessible location and condition for a period of not fewer than five (5) years after final payment under this Agreement or until after final audit has been resolved, whichever is later.

### 12.5 **General.**

- (a) Entire Agreement. This Agreement the exhibits, attachments, and any written and fully executed supplements hereto, any designated collateral, credit support, or similar arrangement between the Parties constitute the entire agreement between the Parties relating to the subject matter.
- (b) Construction. This Agreement shall be considered for all purposes as prepared through the joint efforts of the Parties and shall not be construed against one Party or the other as a result of the preparation, substitution, submission or other event of negotiation, drafting or execution hereof.
- (c) Amendments. Except to the extent herein provided for, no amendment or modification to this Agreement shall be enforceable unless reduced to writing and executed by both Parties.
- (d) No Third Party Beneficiaries. This Agreement shall not impart any rights enforceable by any third party (other than a permitted successor or assignee bound to this Agreement).
- (e) No Waiver. Waiver by a Party of any default by the other Party shall not be construed as a waiver of any other default.
- (f) Change in Law. If any provision of this Agreement is rendered unlawful by action by any Governmental Authority, or any change in Applicable Law (a "Change in Law")

occurring after the Execution Date, the remaining lawful obligations that arise under this Agreement shall not be affected. If the Change in Law results in material changes to the Parties' obligations with regard to any Product sold hereunder and that has the effect of changing the transfer and sale procedure set forth in this Agreement so that the implementation of this Agreement becomes impossible or impracticable, or otherwise modifies the RPS or language required to conform to the RPS, the Parties shall work in good faith to revise this Agreement in a manner that maintains to the greatest extent practicable the original intent of the Parties under this Agreement so that the Parties may perform their obligations regarding the purchase and sale of Product. If the Parties cannot reach a good faith agreement on amendments, the Agreement shall be terminated by mutual agreement without liability for either Party.

- (g) Headings. The headings used herein are for convenience and reference purposes only.
- (h) Assigns. This Agreement shall be binding on each Party's successors and permitted assigns.
- (i) No Dedication. No undertaking by one Party to the other under any provision of the Agreement shall constitute the dedication of that Party's system or any portion thereof to the other Party or to the public or affect Seller as an independent entity and not a public utility.
- (j) Relationship of the Parties. The duties, obligations and liabilities of the Parties are independent of one another and shall be limited to those expressly set forth herein. The Agreement shall not be interpreted or construed to create an association, joint venture, fiduciary relationship or partnership between Seller and Buyer or to impose any partnership obligation or liability or any trust or agency obligation or relationship upon either Party. Seller and Buyer shall not have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or act as or be an agent or representative of or otherwise bind the other Party. Seller and Buyer intend to act as energy supplier and energy purchaser, respectively, and do not intend to act as, or to be treated as, partners in, co-venturers in, or lessor/lessee with respect to the Facility or any business related to the Facility.
- (k) Compliance with Americans with Disabilities Act. Seller acknowledges that, pursuant to the Americans with Disabilities Act (ADA), programs, services and other activities provided by a public entity to the public, whether directly or through a contractor, must be accessible to the disabled public. Seller shall provide the services specified in this Agreement in a manner that complies with the ADA and any and all other applicable federal, state and local disability rights legislation. Seller agrees not to discriminate against disabled persons in the provision of services, benefits or activities provided under this Agreement and further agrees that any violation of this prohibition on the part of Seller, its employees, agents or assigns will constitute a material breach of this Agreement.
- (l) Limitations on Contributions. Through execution of this Agreement, Seller acknowledges that it is familiar with Section 1.126 of City's Campaign and Governmental Conduct Code, which prohibits any person who contracts with City for the rendition of personal services or for the furnishing of any material, supplies or equipment to City, whenever such transaction would require approval by City's elective officer of the board on which that elective officer serves, from making any campaign contribution to the officer at any time from the commencement of negotiations for the contract until the later of either: (1) the termination of negotiations for such contract, or (2) three months after the date this Agreement is approved by the City's elective officer or the board on which that elective officer serves.



- (m) Prohibition on Political Activity with City Funds. In accordance with San Francisco Administrative Code Chapter 12.G, Seller may not participate in, support, or attempt to influence any political campaign for a candidate or for a ballot measure in San Francisco (collectively, "Political Activity") in the performance of this Agreement. Seller agrees to comply with San Francisco Administrative Code Chapter 12.G and any implementing rules and regulations promulgated by the Controller. The terms and provisions of Chapter 12.G are incorporated herein by this reference. In the event Seller violates the provisions of this Section, Buyer may, in addition to any other rights or remedies available hereunder, (i) terminate this Agreement, and (ii) prohibit Seller from bidding on or receiving any new City contract for a period of two years. The Controller will not consider Seller's use of profit as a violation of this Section.
- (n) Nondiscrimination Requirements.
- (i) Seller shall comply with the provisions of Chapter 12B of the San Francisco Administrative Code. Seller shall incorporate by reference in all subcontracts the provisions of Sections 12B.2(a) and 12B.2(c)-(k) of the San Francisco Administrative Code and shall require all subcontractors to comply with such provisions. Seller is subject to the enforcement and penalty provisions in Chapters 12B and 12C.
- (ii) Seller represents that it does not as of the date of this Agreement, and will not during the term of this Agreement, in any of its operations in San Francisco, on real property owned by San Francisco, or where work is being performed for the Buyer elsewhere in the United States, discriminate in the provision of employee benefits between employees with domestic partners and employees with spouses and/or between the domestic partners and spouses of such employees, subject to the conditions set forth in San Francisco Administrative Code Section 12B.2.
- (o) Submitting False Claims. The full text of San Francisco Administrative Code Chapter 21, Section 21.35, including the enforcement and penalty provisions, is incorporated into this Agreement. Pursuant to San Francisco Administrative Code Section 21.35, any contractor or subcontractor who submits a false claim shall be liable to Buyer for the statutory penalties set forth in that section. A contractor or subcontractor will be deemed to have submitted a false claim to Buyer if the contractor or subcontractor: (a) knowingly presents or causes to be presented to an officer or employee of Buyer a false claim or request for payment or approval; (b) knowingly makes, uses, or causes to be made or used a false record or statement to get a false claim paid or approved by Buyer; (c) conspires to defraud Buyer by getting a false claim allowed or paid by Buyer; (d) knowingly makes, uses, or causes to be made or used a false record or statement to conceal, avoid, or decrease an obligation to pay or transmit money or property to Buyer; or (e) is a beneficiary of an inadvertent submission of a false claim to Buyer, subsequently discovers the falsity of the claim, and fails to disclose the false claim to Buyer within a reasonable time after discovery of the false claim.
- (p) Use of City Opinion. Seller shall not quote, paraphrase, or otherwise refer to or use any opinion of Buyer, its officers or agents, regarding Seller or Seller's performance under this contract without prior written permission of the Buyer.
- (p) Compliance with Laws. Seller shall keep itself fully informed of the City's Charter, codes, ordinances and regulations of City and of all state, and federal laws in any manner affecting the performance of the Agreement, and must at all times materially comply with such local codes, ordinances, and regulations and all applicable laws as they may be amended from time to time. Buyer use best efforts to provide notice to Seller of any such amendment to the City's Charter, codes, ordinances and regulations

of which it becomes aware; however, Seller's obligations under this Section shall not be contingent on notice from Buyer.

- (q) **Conflict of Interest.** Through its execution of this Agreement, Seller acknowledges that it is familiar with the provision of Section 15.103 of the City's Charter, Article III, Chapter 2 of City's Campaign and Governmental Conduct Code, and Section 87100 et seq. and Section 1090 et seq. of the Government Code of the State of California, and certifies that it does not know of any facts which constitutes a violation of said provisions and agrees that it will immediately notify Buyer if it becomes aware of any such fact during the term of this Agreement.
- (r) **Severability.** Should any provision of the Agreement be or become void, illegal or unenforceable, the validity or enforceability of the other provisions of the Agreement shall not be affected and shall continue in full force and effect. The Parties shall, however, use their best endeavors to agree on the replacement of the void, illegal, or unenforceable provision(s) with legally acceptable clauses which correspond as closely as possible to the sense and purpose of the affected provision.
- (s) **Survival.** All rights pursuant to (i) Section 3.5 (Environmental Attributes); Section 4.1(d) (Disputes and Adjustment of Invoices); Article 9 (Events of Default; Remedies; Limitations), (iii) Article 10 (Indemnification), (iv) Section 12.2 (Confidential Information); (v) Section 12.3 (Dispute Resolution/Choice of Law), and (vi) Section 12.4 (Audit); (vii) Section 12.5(m) (Prohibition of Political Use of City Funds); and (viii) Section 12.5(p) (City Opinion) shall also survive termination of this Agreement.

**12.6 Mobile Sierra.** Absent the prior written agreement of all Parties, the standard of review for changes to any rate, charge, term, or condition of service of this Agreement, whether proposed by a Party, a non-party or FERC acting *sua sponte*, shall be the "public interest" standard of review set forth in United Gas Pipe Line Co. v. Mobile Gas Service Corp., 350 U.S. 332 (1956) and Federal Power Commission v. Sierra Pacific Power Co., 350 U.S. 348 (1956).

**12.7 Forward Contract.** The Parties acknowledge and agree that this Agreement constitutes a "forward contract" within the meaning of the United States Bankruptcy Code.

**12.8 Notices.** Unless otherwise stated in this Agreement, any notice, demand, request, or communication required or authorized by this Agreement shall be delivered either by hand, facsimile, electronic mail, overnight courier or mailed by certified mail, return receipt requested with postage prepaid, to the contacts set forth in the Cover Sheet. Either Party may change any information listed in the Notice section of the Cover Sheet, by written notice as provided in this Section. Any such notice, demand, request, or communication shall be deemed received on the Business Day on which the notice was transmitted if delivery was made by hand, facsimile or electronic mail, or (ii) upon receipt by the receiving Party if sent by overnight courier or mailed by certified mail, return receipt requested with postage prepaid.

**12.9 Counterparts.** This Agreement may be executed in one or more counterparts and by different Parties on separate counterparts, all of which shall be deemed one and the same agreement and each of which shall be deemed an original. Delivery of an executed counterpart of this Agreement by fax or other electronic means shall be deemed as effective as delivery of an originally executed counterpart. Any Party delivering an executed counterpart of this Agreement by facsimile or other electronic means shall also deliver an originally executed counterpart, but the failure of any Party to deliver an originally executed counterpart of this Agreement shall not affect the validity or effectiveness of this Agreement.

IN WITNESS WHEREOF, each of the Parties have caused this Agreement to be duly executed as of the Execution Date.

City and County of San Francisco,  
acting by and through  
its Public Utilities Commission, CleanPowerSF

[Seller]

By: \_\_\_\_\_

Harlan J. Kelly, Jr.  
General Manager,  
San Francisco Public Utilities  
Commission

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Approved as to Form:

Dennis J. Herrera  
City Attorney

By: \_\_\_\_\_

Deputy City Attorney

## EXHIBIT A

### SELLER DOCUMENTATION OF CONDITIONS PRECEDENT

Seller shall provide to Buyer all of the following documentation at least five (5) Business Days prior to the Execution Date:

1. A copy of each of (a) the articles of incorporation, certificate of incorporation, operating agreement or similar applicable organizational document of Seller and (b) the by-laws or other similar document of Seller (collectively, "Charter Documents") as in effect, or anticipated to be in effect, on the Execution Date.
2. A certificate from the jurisdiction of Seller's incorporation or organization certifying that Seller is duly organized, validly existing and in good standing under the laws of such jurisdiction.
3. Evidence of CEC Certification satisfactory to Buyer.
4. A copy of the Interconnection Agreement, if any.
5. Insurance documentation as required in Exhibit D.
6. A copy of the most recent financial statements (which may be unaudited) from Seller and Seller's Parent together with a certificate from the Chief Financial or equivalent officer of Seller, dated no earlier than ten (10) Business Days prior to the Seller Execution, to the effect that, to the best of such officer's knowledge, (A) such financial statements are true, complete and correct in all material respects and (B) there has been no material adverse change in the financial condition, operations, properties, business or prospects of Seller since the date of such financial statements.

**EXHIBIT B**

**FACILITY DESCRIPTION AND SITE DRAWINGS**

**I. Facility Description**

Facility name:

Facility physical address:

Assessor's Parcel No:

Technology type (including any applicable model):

Interconnection Point of Facility:

Local Capacity Area:

The nameplate capacity of the Facility:

**II. Site Drawings**

**[INSERT SITE MAP]**

**[INSERT ONE-LINE DIAGRAM FOR  
INTERCONNECTION FACILITIES AND METERING]**

**EXHIBIT C**  
**CONTRACT QUANTITIES**

**[INSERT TABLE OF MONTHLY ENERGY AND RA QUANTITIES]**

## EXHIBIT D

### INSURANCE COVERAGES

**1. Liability Coverages.** Without in any way limiting Seller's liability pursuant to the "Indemnification" section of this Agreement, Seller must maintain in force, during the full term of the Agreement, insurance in the following amounts and coverages and be responsible for its subcontractors, including Seller's EPC Contractors, maintaining sufficient limits of the appropriate insurance:

- (a) Workers' Compensation, in statutory amounts, with Employers' Liability Limits not less than \$1,000,000 each accident, injury, or illness; and
- (b) Commercial General Liability Insurance with limits not less than \$1,000,000 each occurrence and \$2,000,000 general aggregate for Bodily Injury and Property Damage, including Contractual Liability, Personal Injury, Products and Completed Operations; and
- (c) Commercial Automobile Liability Insurance with limits not less than \$1,000,000 each occurrence, "Combined Single Limit" for Bodily Injury and Property Damage, including Owned, Non-Owned and Hired auto coverage, as applicable.

**2. Additional Coverages**

- (a) Property insurance, on an all-risk form, including earthquake and flood, for one hundred percent (100%) of the full replacement value of the Site and Facility. Such insurance shall include Business Interruption coverage in an amount equal to twelve months of revenue from this Agreement.

**3. Endorsements.**

- (a) Commercial General Liability and Commercial Automobile Liability Insurance policies must be endorsed to provide:
  - (i) Name as Additional Insured, the City and County of San Francisco, its Officers, Agents, and Employees.
  - (ii) That such policies are primary insurance to any other insurance available to the Additional Insureds, with respect to any claims arising out of this Agreement, and that insurance applies separately to each insured against whom claim is made or suit is brought.
- (b) All policies shall be endorsed to provide thirty (30) days' advance written notice to Buyer of cancellation for any reason, intended non-renewal, or reduction in coverages.

**4. Length of Coverage.** Should any of the required insurance be provided under a claims-made form, Seller shall maintain such coverage continuously throughout the term of this Agreement and, without lapse, for a period of three years beyond the expiration of this Agreement, to the effect that, should occurrences during the Term give rise to claims made after expiration of the Agreement, such claims shall be covered by such claims-made policies.

**5. Maintenance of Coverage.** Should any required insurance lapse during the term of this Agreement, requests for payments originating after such lapse shall not be processed until the Buyer receives satisfactory evidence of reinstated coverage as required by this Agreement, effective as of the lapse date. If insurance is not reinstated, Buyer may, at its sole option, terminate this Agreement effective on the date of such lapse of insurance.

**6. Certificates.** Prior to commencement of the Term, Seller shall furnish to Buyer certificates of insurance and additional insured policy endorsements with insurers with ratings comparable to A-, VIII or higher, that are authorized to do business in the State of California, and that are satisfactory to Buyer, in form evidencing all coverages set forth above. Approval of the insurance by Buyer shall not relieve or decrease Seller's liability hereunder.

## **EXHIBIT E**

### **SCHEDULING PROTOCOLS**

Following the Execution Date, the Parties shall agree on Scheduling Protocols, which shall be consistent with the CAISO Tariff, customary industry practice, and the Facility's operational parameters (including as to levels and timing of curtailments), such agreement not to be unreasonably withheld by either Party.



**EXHIBIT F-1**

**FORM OF LETTER OF CREDIT**

**[Issuing Bank Letterhead and Address]**

STANDBY LETTER OF CREDIT NO. XXXXXXXX

**Date:** [Insert issue date]

**Beneficiary:** City and County of San Francisco, acting by and through its Public Utilities Commission, CleanPowerSF  
525 Golden Gate Avenue  
San Francisco, CA 94102  
Attn:

**Applicant:** [Insert name and address of Applicant]

**Letter of Credit Amount:** [insert Amount]

**Expiry Date:** [insert expiry date]

Ladies and Gentlemen:

By order of [insert name of Applicant] ("Applicant"), we hereby issue in favor of the City and County of San Francisco, acting by and through its Public Utilities Commission, CleanPowerSF, (the "Beneficiary") our irrevocable standby letter of credit No. [insert number of letter of credit] ("Letter of Credit"), for the account of Applicant, for drawings up to but not to exceed the aggregate sum of U.S. \$ [insert amount in figures followed by (amount in words)] ("Letter of Credit Amount"). This Letter of Credit is available with [insert name of issuing bank, and the city and state in which it is located] by sight payment, at our offices located at the address stated below, effective immediately, and it shall expire at our close of business on [insert expiry date] (the "Expiry Date").

Funds under this Letter of Credit are available to the Beneficiary against presentation of the following documents:

1. Beneficiary's signed and dated sight draft in the form of Exhibit A hereto, referencing this Letter of Credit No. [insert number] and stating the amount of the demand; and
2. One of the following statements signed by an authorized representative or officer of Beneficiary:
  - A. Pursuant to the terms of that certain [insert name of the agreement] (the "Agreement"), dated [insert date of the Agreement], between Beneficiary and [insert name of Seller under the Agreement], Beneficiary is entitled to draw under Letter of Credit No. [insert number] amounts owed by [insert name of Seller under the Agreement] under the Agreement; or
  - B. "Letter of Credit No. [insert number] shall expire in thirty (30) days or less and [insert name of Seller under the Agreement] has not provided replacement security acceptable to Beneficiary.

Special Conditions:

1. Partial and multiple drawings under this Letter of Credit are allowed;
2. All banking charges associated with this Letter of Credit are for the account of the Applicant;
3. This Letter of Credit is not transferable; and
4. The Expiry Date of this Letter of Credit shall be automatically extended without a written amendment for a period of one year and on each successive Expiry Date, unless at least sixty (60) days before the then current Expiry Date, we notify you by registered mail or courier that we elect not to extend the Expiry Date of this Letter of Credit for such additional period.

We engage with you that drafts drawn under and in compliance with the terms of this Letter of Credit shall be duly honored upon presentation, on or before the Expiry Date (or after the Expiry Date as provided below), at our offices at **[insert issuing bank's address for drawings]**.

All demands for payment shall be made by presentation of originals or copies of documents; or by facsimile transmission of documents to **[insert fax number]**, Attention: **[insert name of issuing bank's receiving department]**, with originals or copies of documents to follow by overnight mail. If presentation is made by facsimile transmission, you may contact us at **[insert phone number]** to confirm our receipt of the transmission. Your failure to seek such a telephone confirmation does not affect our obligation to honor such a presentation.

Our payments against complying presentations under this Letter of Credit shall be made no later than on the sixth (6th) banking day following a complying presentation.

Except as stated herein, this Letter of Credit is not subject to any condition or qualification. It is our individual obligation, which is not contingent upon reimbursement and is not affected by any agreement, document, or instrument between us and the Applicant or between the Beneficiary and the Applicant or any other party.

Except as otherwise specifically stated herein, this Letter of Credit is subject to and governed by the *Uniform Customs and Practice for Documentary Credits, 2007 Revision*, International Chamber of Commerce (ICC) Publication No. 600 (the "UCP 600"); provided that, if this Letter of Credit expires during an interruption of our business as described in Article 36 of the UCP 600, we shall honor drafts presented in compliance with this Letter of Credit within thirty (30) days after the resumption of our business and effect payment accordingly. The law of the State of New York shall apply to any matters not covered by the UCP 600.

For telephone assistance regarding this Letter of Credit, please contact us at **[insert number and any other necessary details]**.

**EXHIBIT F-2**

**SIGHT DRAFT**

TO: [INSERT NAME AND ADDRESS OF PAYING BANK]

AMOUNT: \$

DATE:

AT SIGHT OF THIS DEMAND PAY TO THE ORDER OF \_\_\_\_\_ THE

AMOUNT OF U.S.\$ \_\_\_\_\_ (\_\_\_\_\_ U.S. DOLLARS)

DRAWN UNDER [INSERT NAME OF ISSUING BANK] LETTER OF CREDIT NO. XXXXXX.

REMIT FUNDS AS FOLLOWS:

[INSERT PAYMENT INSTRUCTIONS]

DRAWER

BY: \_\_\_\_\_  
NAME AND TITLE

## EXHIBIT G

### NOTIFICATION REQUIREMENTS FOR AVAILABLE CAPACITY AND PROJECT OUTAGES AND CURTAILMENTS

#### 1. Notification Requirements For Routine Start-Up and Shutdowns

Prior to paralleling or after disconnecting from the electric system, ALWAYS follow your balancing authority rules and notify the applicable Participating Transmission Owner's (PTO) switching center.

- Call the applicable Participating Transmission Owner's (PTO) switching center and Buyer at \_\_\_\_\_ to advise of the intent to parallel before any Start-up.
- Call the applicable Participating Transmission Owner's (PTO) switching center and Buyer at \_\_\_\_\_ after the unit has been paralleled and report the parallel time and intended unit output.
- Call the applicable Participant Transmission Owner's (PTO) switching center and Buyer at \_\_\_\_\_ after any routine separation and report the separation time as well as the date and time estimate for return to service.

#### 2. Submission of Available Capacity and Planned Outages

Submit information as set forth below:

- a. For all email correspondence: \_\_\_\_\_
- b. For Annual Forecasts of Available Capacity: \_\_\_\_\_,
- c. For Monthly and Weekly Forecasts of Available Capacity: \_\_\_\_\_
- d. For Hourly Forecasts of Available Capacity: \_\_\_\_\_
- e. For Planned Outages: \_\_\_\_\_ Include the following information:
  - i. Start Date and Start Time
  - ii. Estimated or Actual End Date and End Time for Outage
  - iii. Date and time when reported to Buyer and name(s) of Buyer's representative(s) contacted
  - iv. Description of additional information as needed, including, but not limited to, changes to a Planned Outage.
  - v. Contact name: first and last name of the individual at the Facility to contact regarding the outage(s) at issue in the email.

#### 3. Forced Outage Reporting

- a. Forced Outages – Seller shall notify Buyer verbally at \_\_\_\_\_ ten (10) minutes of event or as soon as reasonably possible, after the safety of all personnel and securing of all facility equipment.

- a. Verbal notification shall include time of Forced Outage, cause, expected duration, and capacity reduction.
- b. After verbally notifying Buyer of the Forced Outage, Seller shall also take commercially reasonable efforts to notify Buyer's Scheduling Coordinator.
- c. As soon as practicable, but no later than forty-eight (48) hours after the commencement of the Forced Outage, Seller shall provide Buyer with an email to \_\_\_\_\_.

1. Type of Outage: Forced Outage
2. Start Date and Start Time
3. Estimated or Actual End Date and End Time
4. Date and time when reported to PG&E and name(s) of PG&E representative(s) contacted.
5. Text description of additional information as needed.
6. Primary and secondary causes of Forced Outage, including a detailed description of specific equipment involved and the nature of the problem or condition.
7. Equipment description and nature of work being performed. For generation outages, include NERC Generation Availability Data System (GADS) numbers (as available) that identify the specific equipment and type of work that affect restrictions. Include additional equipment designations as available.
8. Text description of additional information as needed, including, but not limited to, changes to a previously scheduled Outage, links/cross-references to related outage cards and log entries, outage classifications per the CAISO Tariff, etc.
9. Associated events, e.g. operation of Special Protection Schemes.
10. Impact on CAISO-controlled Grid.

#### 4. Buyer Curtailment Orders

Operational characteristics of the Project for Buyer Curtailment Orders are listed below. Buyer, as the Scheduling Coordinator, may request that CAISO modify the Master File for the Project to reflect the findings of a CAISO audit of the Project. In addition, Seller agrees to coordinate with Buyer or Third-Party SC, as applicable, to ensure all information provided to the CAISO regarding the operational and technical constraints in the Master File for the Project are accurate and are based on the true physical characteristics of the resource.

- PMax of the Project: \_\_\_\_ MW
- Minimum operating capacity: \_\_\_\_ MW
- Ramp Rate: \_\_\_\_ MW/Minute

#### *[For As-Available Products]*

- Advance notification required for Buyer Bid Curtailment and Buyer Curtailment Order: Not greater than the shortest Dispatch Interval in the Real-Time Market (as defined in the CAISO Tariff).

- Maximum number of Start-ups per calendar day (if any such operational limitations exist):  
\_\_\_\_\_

***[For Baseload Products]***

- Maximum number of Start-ups per calendar day, month, year (if any such operational limitations exist): \_\_\_\_\_
- Advance notification required for Buyer Bid Curtailment and Buyer Curtailment Order: Not greater than the shortest Dispatch Interval in the Real-Time Market (as defined in the CAISO Tariff).

**Other Requirements:**

- Maximum number of hours annually for Buyer Curtailment Periods: unlimited hours
- The Project will be capable of receiving and responding to all Dispatch Instruction in accordance with Section 3.1(q).
- Start-Up Time (if applicable): \_\_\_\_\_ Minutes
- Minimum Run Time after Start-Up (if applicable): \_\_\_\_\_ Minutes
- Minimum Down Time after Shut-Down (if applicable): \_\_\_\_\_ Minute

## EXHIBIT H

### Community Benefits Commitments

1. **Community Benefits Manager.** \_\_\_\_\_ shall serve as the manager of Seller's community benefits commitments ("Manager") and provide fiduciary oversight. The Manager shall ensure that the community benefits commitments listed in the community benefits table below are delivered to the communities that they are intended to benefit in a transparent and accountable manner. The Manager shall work with Buyer's Community Benefits Coordinator, to organize, plan, track, measure, and report on Seller's community benefits commitments. The Manager shall coordinate the senior management of Seller's subconsultants to ensure the entire team participates in providing benefits to the community benefits set forth in this Agreement.

2. **Performance.**

(a) Following the Execution of this Agreement, Seller commits to providing the Community Benefits Commitments detailed below during the Term of the Agreement. Seller's commitments shall be funded independently by Seller and shall not be tied to or dependent upon Buyer's funds or sources of funding, or receivables from Buyer. The representations, warranties and other terms contained in this Exhibit K have been designed by Seller as the basis for a Community Benefit Plan, but are for the sole benefit of the Parties hereto and shall not be construed as conferring any rights on any other persons or entities.

(b) Community Benefits are a deliverable, zero-dollar task. No hours or dollars should be allotted or included in Seller's costs for this Project in order to perform or deliver the voluntarily proposed Community Benefits Commitments. If Seller commits any funds to delivering the Community Benefits Commitments it proposes, all such funds must be independent of Buyer funding or any dollars associated with this Agreement. If Buyer commits to contributing any funds to performing or delivering its commitments related to this task, such funds may not be dependent in any way upon receipt of Buyer payments under this Agreement.

(c) Seller's Community Benefits Commitments shall be performed prospectively during the Term of the Agreement. Commitments performed as part of previous contracts or prior to the award of this Agreement to Seller cannot be used as part of Seller's Community Benefits Commitments for this Agreement. If Seller has established programs or plans that are consistent with the Community Benefits areas described in the Request for Offers for this Agreement, Seller may continue those programs as part of its community benefits commitments and will be given credit for activities that are performed after the contract is awarded by Buyer.

3. **Deliverables**

(a) Seller shall meet with the SFPUC Assistant General Manager for External Affairs and External Affairs Community Benefits and Social Responsibility Manager to develop a Community Benefits Plan and Timeline within three (3) months of Execution Date. The Community Benefits Plan and Timeline will provide details regarding expenditures, a schedule, and timelines related to the Community Benefits Commitments outlined in the Community Benefits Table.

(b) Seller shall meet once a year with the External Affairs Community Benefits and Social Responsibility Manager during the implementation of the Community Benefits Plan to discuss the work plan and associated timelines, and make any adjustments or updates regarding timing, expenditure of funds, partners, strategic delivery, scale, and performance necessary to ensure the commitments are aligned with and driven by Buyer's priorities and SFPUC's community benefits strategy to ensure we maximize the collective resources and positive impact.

4. **Community Benefits Commitments.** Seller will deliver the proposed Community Benefits Commitments in the community benefits table which provides a description of the community benefit activity, expected outcomes, the timetable and duration of the commitments, the dollar amount of direct contributions, the number and cost of volunteer hours, and trainee hours that will be committed to each specific initiative, as well as for the total value of the Community Benefits Commitments. **[INSERT DESCRIPTION OF COMMITMENTS]** Any changes that occur to the Community Benefits Commitments must be approved by the Community Benefits and Social Responsibility Manager.

**Community Benefits Summary Table**

	(A)	(B)	(C)	(D)	(E)
<b>Community Benefit Category</b>	<b>Direct Financial Contribution</b>	<b>Volunteer Hours</b>	<b>Volunteer Hourly Rate (rate is standardized)</b>	<b>Value of Volunteer Hours (B x C)</b>	<b>Total Contributions (A + D + E)</b>
<b>TOTAL</b>					

5. **Reporting Requirements:**

(a) Seller shall provide detailed descriptions of accountability methods and measures that will be implemented to ensure that the proposed Community Benefits Commitments will be delivered to the communities they are intended to benefit in a transparent and accountable manner. To maximize transparency and accountability, a process or mechanism must be proposed that will assist Buyer in independently verifying that such funds and resources were actually delivered to the intended beneficiaries.

(b) During the implementation of the Community Benefits Commitments, Seller shall submit progress reports to the SFPUC External Affairs Community Benefits and Social Responsibility Manager, which should detail factors such as total number of hours, dollars, etc. contributed to-date. Reports are submitted on the last business day of the month following the close of the 2<sup>nd</sup> and 4<sup>th</sup> quarter. As part of the progress reports, Seller will also submit documents to substantiate that the Community Benefits Commitments were in fact delivered to the communities they were intended to benefit.

(c) Seller shall also submit an annual report and newsletter to the SFPUC External Affairs Community Benefits and Social Responsibility Manager documenting the Community Benefit Commitments, beneficiaries, and outcomes for the year.

6. **Seller Acknowledgement.** Seller acknowledges that it agrees with the following statements:

(a) Any of the Community Benefits Commitments should directly benefit the communities, neighborhoods, and/or residents identified in the Community Benefits Commitments Proposal attached hereto as Attachment 1.

(b) Commitments must support nonprofit and charitable activities.

(c) Commitments shall not go to, nor benefit any SFPUC employee or entities associated with the SFPUC.

(d) Commitments must be delivered at zero cost to the SFPUC.



- (e) Commitments are separate from and in addition to any regulatory or legal requirements related to the contract.
- (f) Commitments are considered binding once they are included in the final agreement.
- (g) Activities related to the commitments can only commence once there is a Notice to Proceed (NTP) associated with this project.
- (h) Contractor commits to complying with SFPUC's reporting requirements.
- (i) Seller shall provide all of the Commitments, consistent with all of the terms of Seller's Community Benefits Commitments Proposal which are not explicitly set forth in this Exhibit K. If there are any conflicts or discrepancies between this Agreement and the attached Proposal, the terms of this Agreement shall prevail.





San Francisco  
**Water  
Power  
Sewer**

Services of the San Francisco  
Public Utilities Commission

**CleanPowerSF**  
*Same Service • Cleaner Energy*

**RENEWABLE POWER PURCHASE AGREEMENT**

**(NEW FACILITY)**

**by and between**

**THE CITY AND COUNTY OF SAN FRANCISCO,**

**ACTING BY AND THROUGH ITS PUBLIC UTILITIES COMMISSION,  
CLEANPOWERSF**

**and**

**[SELLER]**

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## EXHIBITS

The follows Exhibits constitute a part of this Agreement and are incorporated into the Agreement by reference.

<b>EXHIBIT A</b>	SELLER DOCUMENTATION OF CONDITIONS PRECEDENT
<b>EXHIBIT B</b>	FACILITY DESCRIPTION AND SITE DRAWINGS
<b>EXHIBIT C</b>	CONTRACT QUANTITY
<b>EXHIBIT D</b>	INSURANCE COVERAGES
<b>EXHIBIT E</b>	SCHEDULING PROTOCOLS
<b>EXHIBIT F</b>	CONSTRUCTION START CERTIFICATION
<b>EXHIBIT G</b>	MONTHLY PROGRESS REPORT
<b>EXHIBIT H-1</b>	COMMERCIAL OPERATION CERTIFICATION PROCEDURE
<b>EXHIBIT H-2</b>	COMMERCIAL OPERATION CERTIFICATION
<b>EXHIBIT I</b>	INITIAL ENERGY DELIVERY DATE CONFIRMATION
<b>EXHIBIT J-1</b>	CAPACITY TEST PROCEDURE
<b>EXHIBIT J-2</b>	INSTALLED CAPACITY CERTIFICATE
<b>EXHIBIT K-1</b>	FORM OF LETTER OF CREDIT
<b>EXHIBIT K-2</b>	SIGHT DRAFT
<b>EXHIBIT M</b>	NOTIFICATION REQUIREMENTS FOR AVAILABLE CAPACITY AND PRODUCT OUTAGES AND CURTAILMENTS
<b>EXHIBIT N</b>	REPLACEMENT RA CAPACITY
<b>EXHIBIT O</b>	COMMUNITY BENEFITS COMMITMENTS

**Attachment 1:** SELLER'S COMMUNITY BENEFITS COMMITMENTS PROPOSAL

**POWER PURCHASE AGREEMENT**

**COVER SHEET**

This Renewable Power Purchase Agreement (“Agreement”) is entered into between the City and County of San Francisco, acting by and through its Public Utilities Commission, Power Enterprise, CleanPowerSF program (“Buyer”) and [insert name of Seller], a \_\_\_\_\_ [include place of formation and business type] (“Seller”), as of \_\_\_\_\_ (the “Execution Date”). The Agreement shall include the exhibits, attachments, any written and fully executed supplements hereto, and any designated collateral, credit support, or similar arrangement between the Parties.

**A. Transaction**

Product: Energy and associated Environmental Attributes and Capacity Attributes

Facility:

Address:

Expected Initial Capacity:

Contract Price:

Delivery Point:

Delivery Period:

Deliverability:

- Energy Only, or
- Full Capacity Delivery Status

**B. Milestones**

Construction Milestone: \_\_\_\_\_

Major Equipment Milestone: \_\_\_\_\_

Commercial Operation Milestone: \_\_\_\_\_

**C. Collateral**

Development Assurance: \$ \_\_\_\_\_

- Cash,
- Guaranty, or
- Letter of Credit

Performance Assurance: \$ \_\_\_\_\_

- Cash,
- Guaranty, or
- Letter of Credit

**D. Notices**

<p><b>City and County of San Francisco, acting by and through its Public Utilities Commission, CleanPowerSF (Buyer)</b></p>	<p><b>Seller:</b></p>
<p><b>All Notices:</b>  525 Golden Gate Ave, 7th Floor San Francisco, CA, 94102 Attn: Contract Administration Phone: 415-554-4603 Facsimile: 415-554-3225</p>	<p><b>All Notices:</b></p>
<p><b>Federal Tax ID Number:</b> 946000417</p>	<p><b>Federal Tax ID Number:</b> <b>DUNS Number:</b></p>
<p><b>Invoices:</b> Attn: Phone: Facsimile:</p>	<p><b>Invoices:</b> Attn: Phone: Facsimile:</p>
<p><b>Scheduling:</b> Attn: Phone: Facsimile: Email: Scheduling Desk: <a href="mailto:PowerScheduler@sfwater.org">PowerScheduler@sfwater.org</a></p>	<p><b>Scheduling:</b> Attn: Phone: Facsimile:  Email:</p>
<p><b>Payments:</b> Attn: Phone: Facsimile:</p>	<p><b>Payments:</b> Attn: Phone: Facsimile:</p>
<p><b>Wire Transfer:</b> BNK: ABA (ACH): ACCT:</p>	<p><b>Wire Transfer:</b> BNK: ABA: ACCT:</p>
<p><b>Credit and Collections:</b> Attn: Phone: Facsimile:</p> <p><b>With additional Notices of an Event of Default or Potential Event of Default to:</b></p> <p>Phone: Facsimile:</p>	<p><b>Credit and Collections:</b> Attn: Phone: Facsimile:</p> <p><b>With additional Notices of an Event of Default or Potential Event of Default to:</b></p>



## RECITALS

1. Seller intends to develop, finance, build, own and operate a \_\_\_\_\_ generating facility located at \_\_\_\_\_; and,
2. Buyer operates CleanPowerSF, a community choice aggregator that serves retail customers in the City and County of San Francisco; and,
3. Buyer is willing to purchase, and Seller is willing to sell, the Product of the Facility, on the terms and conditions and at the prices set forth in this Agreement.

**NOW THEREFORE**, in consideration of the recitals above and the following covenants, terms and conditions, the Parties agree as follows:

## ARTICLE 1: DEFINITIONS

**AC:** Means alternating current.

**Affiliate:** With respect to any person, any other person (other than an individual) that, directly or indirectly, through one or more intermediaries, controls, or is controlled by, or is under common control with, such person. For this purpose, “control” means the direct or indirect ownership of fifty percent (50%) or more of the outstanding capital stock or other equity interests having ordinary voting power.

**Agreement:** Has the meaning set forth in the Cover Sheet.

**Agreement Term:** Has the meaning set forth in Section 2.3(a).

**Ancillary Services:** Has the meaning set forth in the CAISO Tariff.

**Applicable Law:** Any statute, law, treaty, rule, tariff, regulation, ordinance, code, permit, enactment, injunction, order, writ, decision, authorization, judgment, decree or other legal or regulatory determination or restriction by a court or governmental authority of competent jurisdiction, including the CAISO (“Governmental Authority”), or any binding interpretation of the foregoing, as any of them is amended or supplemented from time to time, that apply to either or both of the Parties or the terms of the Agreement.

**Availability Standards:** The program set forth in Section 40.9 of the CAISO Tariff, as it may be amended, supplemented or replaced (in whole or in part) from time to time, setting forth certain standards regarding the desired level of availability for Resource Adequacy resources and possible charges and incentive payments for performance thereunder.

**Bankrupt:** With respect to any entity, such entity (a) files a petition or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause of action under any bankruptcy, insolvency, reorganization or similar law, or has any such petition filed or commenced against it and such case filed against it is not dismissed in sixty (60) calendar days, (b) makes an assignment or any general arrangement for the benefit of creditors, (c) otherwise becomes bankrupt or insolvent (however evidenced), (d) has a liquidator, administrator, receiver, trustee, conservator or similar official appointed with respect to it or any substantial portion of its property or assets, or (e) is generally unable to pay its debts as they fall due.

**Board of Supervisors:** Means the Board of Supervisors for the City and County of San Francisco.

**Business Day:** Means any day except a Saturday, Sunday, a Federal Reserve Bank holiday, or a City and County of San Francisco holiday and shall be between the hours of 8:00 a.m. and 5:00 p.m. local time for the relevant Party’s principal place of business. The relevant Party, in each instance unless

otherwise specified, shall be the Party from whom the notice, payment or delivery is being sent and by whom the notice or payment or delivery is to be received.

**Buyer:** The City and County of San Francisco, acting by and through its Public Utilities Commission.

**Buyer Curtailed Product:** Has the meaning set forth in Section 5.6(h)(ii)(B).

**CAISO:** The California Independent System Operator Corporation, or its functional successor.

**CAISO Tariff:** The California Independent System Operator Corporation, Fifth Replacement FERC Electric Tariff, as it may be amended, supplemented or replaced (in whole or in part) from time to time.

**Calendar Quarter:** Has the meaning set forth in Exhibit G.

**Capacity Attributes:** Means any current or future defined characteristic (including the ability to generate at a given capacity level, provide Ancillary Services, and ramp up or ramp down at a given rate), certificate, tag, credit, flexibility, or dispatchability attribute, whether general in nature or specific as to the location or any other attribute of the Facility, intended to value any aspect of the capacity of the Facility to produce energy, including any accounting construct, or any other measure by the CPUC, the CAISO, the FERC, or any other Governmental Authority, to require Buyer to procure, or to procure at Buyer's expense, Resource Adequacy or other such attribute.

**CEC:** Means the California Energy Commission or any successor agency.

**CEC Certification:** Means that the CEC has certified, or pre-certified, that the Facility is an ERR for purposes of the California Renewables Portfolio Standard and that all Product produced by the Facility qualifies as generation from an ERR for purposes of the RPS.

**CEQA:** The California Environmental Quality Act, California Public Resources Code Sections 21000, et. seq., as it may be amended from time to time.

**Change in Law:** Has the meaning set forth in Section 12.5(f).

**City:** The City and County of San Francisco.

**CleanPowerSF:** Means the Buyer's Community Choice Aggregation Program.

**COD Certification:** Seller's certification of Commercial Operation in the form set forth as Exhibit F-3, Attachment 1, duly executed by Seller and its Licensed Professional Engineer.

**Commercial Operation:** The condition of the Facility, whereupon it is certified by Seller to be operating and able to produce and deliver the Product to Buyer pursuant to the terms of this Agreement.

**Commercial Operation Date:** The date upon which Seller notifies Buyer that Commercial Operation has commenced by delivering to Buyer the COD Certification in accordance with Section 5.3(f).

**Commercial Operation Milestone:** Has the meaning set forth in Section 5.3(b)(iii).

**Compliance Cost:** Has the meaning set forth in Section 3.7(a)(i).

**Compliance Cost Cap:** Has the meaning set forth in Section 3.7.

**Confidential Information:** Has the meaning set forth in Section 12.2(b).

**Construction Milestone:** Has the meaning set forth in Section 5.3(b)(i).

**Construction Start Date:** The date on which Seller delivers to Buyer a copy of the Notice to Proceed that Seller has delivered to the EPC Contractor for the Facility.

**Contract Quantity:** The annual expected Energy production set forth in Exhibit C.

**Contract Price:** Has the meaning set forth in Section 3.2.

**Contract Year:** A period of twelve (12) consecutive months, commencing at 12:00 a.m. on the Delivery Start Date, and each subsequent Contract Year commencing on the twelve (12) month anniversary of the Delivery Start Date.

**Controller:** The Controller for the City and County of San Francisco.

**Costs:** With respect to a Non-Defaulting Party, (a) brokerage fees, commissions and other similar third party transaction costs and expenses reasonably incurred by such Party either in terminating any arrangement entered into pursuant to this Agreement or entering into new arrangements which replace this Agreement and (b) all reasonable attorneys' fees and expenses incurred by the Non-Defaulting Party in connection with the termination of this Agreement.

**CPUC:** The California Public Utilities Commission or any successor entity.

**Credit Rating:** With respect to any entity, the rating then assigned to such entity's unsecured senior long-term debt obligations (not supported by third party credit enhancements) or if such entity does not have a rating for its unsecured senior long-term debt, then the rating assigned to such entity as an issuer rating by S&P and/or Moody's.

**Cure:** Has the meaning set forth in Section 6.3(b).

**Curtailed Order:** An order of the PTO, distribution provider, and/or CAISO (whether directly or through a Scheduling Coordinator or the PTO), for any reason, including, but not limited to, any System Emergency, any warning of an anticipated System Emergency, or any warning of an imminent condition or situation which could jeopardize the CAISO's or PTO's electric system integrity or the integrity of other systems to which the CAISO or the PTO is connected, including curtailment in accordance with Seller's obligations under its Interconnection Agreement with the PTO or distribution operator.

**DA Price:** The resource specific locational marginal price ("LMP") applied to the PNode applicable to the Facility in the CAISO Day-Ahead Market.

**Daily Liquidated Damages Amount or Daily LD Amount:** For each day or portion of a day for which delay liquidated damages are payable under Section 5.4(d), an amount equal to the total amount of Development Assurance required hereunder divided by 365.

**Damage Payment:** Means (a) the dollar amount to be posted as Development Assurance pursuant to Section 6.2(a)(i).

**Day-Ahead Forecast:** Has the meaning set forth in Section 5.6(e).

**Day-Ahead Market:** Has the meaning set forth in the CAISO Tariff.

**Defaulting Party:** Means the Party that has caused an Event of Default.

**Deficit Month:** Has the meaning set forth in Section 3.5(c)(iii).

**Delivered Energy:** Has the meaning set forth in Section 4.1(a).

**Delivery Point:** Means \_\_\_\_\_.

**Delivery Start Date:** Has the meaning set forth in Section 2.3(b)(i).

**Delivery Term:** Has the meaning set forth in Section 2.3(b)(i).

**Development Assurance:** Means the collateral provided by Seller to Buyer to secure Seller's obligations hereunder in accordance with Section 6.2(a)(i) of this Agreement.

**Discretionary Curtailment:** Has the meaning set forth in Section 5.6(h)(ii)(A).

**Early Termination Date:** Has the meaning set forth in Section 9.2(a)(i).

**Effective Date:** Means the date on which all of the Conditions Precedent set forth in Section 2.1(a) have been satisfied or waived in writing by both Parties.

**Electric System Upgrades:** Means any Network Upgrades, Distribution Upgrades, or Interconnection Facilities that are determined to be necessary by the CAISO or Participating Transmission Owner, as applicable, to physically and electrically interconnect the Facility to the Participating Transmission Owner's electric system for receipt of Energy at the Point of Interconnection.

**Eligible LC Bank:** Means a U.S. commercial bank or a foreign bank with a U.S. branch, with such bank having a credit rating of at least from A3 from Moody's or A- from S&P.

**Eligible Renewable Energy Resource or ERR:** Has the meaning set forth in California Public Utilities Code Section 399.12 and California Public Resources Code Section 25741, as either code provision is amended or supplemented from time to time.

**Energy:** Means three-phase, 60-cycle alternating current electric energy measured in MWh and net of auxiliary loads and station electrical uses (unless otherwise specified).

**Energy-Only Deliverability Status:** Has the meaning set forth in the CAISO Tariff.

**Environmental Attributes:** Means any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the sale of generation from the Facility or Expansion Facility(s) to Buyer under this Agreement (to the extent of sales to Buyer of Expansion Facility Product pursuant to Section 3.9), and its avoided emission of pollutants. Environmental Attributes include, without limitation, Renewable Energy Credits as well as:

- (a) any avoided emissions of pollutants to the air, soil or water such as sulfur oxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO) and other pollutants;
- (b) any avoided emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere; and
- (c) the reporting rights to these avoided emissions such as Green Tag Reporting Rights. Green Tag Reporting Rights are the right of a Green Tag Purchaser to report the ownership of accumulated Green Tags in compliance with federal or state law, if applicable, and to a federal or state agency or any other party at the Green Tag Purchaser's discretion, and include without limitation those Green Tag Reporting Rights accruing under Section 1605(b) of The Energy Policy Act of 1992 and any present or future federal, state, or local law, regulation or bill, and international or foreign emissions trading program. Green Tag are accumulated on a MWh basis and one Green Tag represents the Environmental Attributes associated with one (1) MWh of Energy.

Environmental Attributes do not include:

- (i) any Energy, capacity, reliability or other power attributes from the Facility,
- (ii) production tax credits associated with the construction or operation of the Facility and other financial incentives in the form of credits, reductions, or allowances associated with the Facility that are applicable to a state or federal income taxation obligation,
- (iii) fuel-related subsidies or "tipping fees" that may be paid to Seller to accept certain fuels, or local subsidies received by the generator for the destruction of particular preexisting pollutants or the promotion of local environmental benefits, or
- (iv) emission reduction credits encumbered or used by a Facility for compliance with local, state, or federal operating and/or air quality permits. If the Facility is a biomass or biogas facility and Seller receives any tradable Environmental Attributes based on the greenhouse gas reduction benefits or other emission offsets attributed to its fuel usage, it shall provide Buyer with sufficient Environmental Attributes to ensure that there are zero net emissions associated with the production of electricity from the Facility.

**EPC Contract:** The Seller's engineering, procurement and construction contract with the EPC Contractor.

**EPC Contractor:** An engineering, procurement, and construction contractor, or if not utilizing an engineering, procurement, and construction contractor, the entity having lead responsibility for the management of overall construction activities, selected by Seller, with substantial experience in the engineering, procurement, and construction of utility-scale [technology-type] power projects.

**Event of Default:** Has the meaning set forth in Section 9.1.

**Excess Quantity:** Has the meaning set forth in Section 3.3(c).

**Execution Date:** Means the date that this Agreement is fully executed by both Parties.

**Expansion Facility:** Any expansion of the Facility from its Initial Capacity, or any other electricity generating facility owned or controlled by Seller or its affiliates, located at the Site. Each such expansion of the Facility or additional facility shall be deemed to be an "Expansion Facility."

**Expansion Facility Product:** All Product, associated Environmental Attributes, Ancillary Services, contributions towards Resource Adequacy or reserve requirements (if any) and any other reliability or power attributes produced by Seller at any Expansion Facility.

**Expected Initial Capacity:** Has the meaning set forth in Section 3.3(a)(i).

**Facility:** The power generation facilities to be constructed, owned and operated by Seller located on the Site for the generation and delivery of electricity as described in Exhibit B, but not including any Expansion Facility.

**FERC:** The Federal Energy Regulatory Commission and any successor organization.

**Force Majeure:** An event or circumstance, including a natural disaster, war, riot, or civil disturbance, which prevents one Party ("Claiming Party") from performing its material obligations under this Agreement, which event or circumstance was not anticipated as of the Execution Date, which is not within the reasonable control of, or the result of the action or inaction of, the Claiming Party, and which, by the exercise of due diligence, the Claiming Party is unable to overcome or avoid or cause to be avoided. Neither Party may raise a claim of Force Majeure based in whole or in part on;

- (a) failures or delays by the PTO and/or the CAISO in entering into, or performing under, any agreements with Seller contemplated by this Agreement, including a failure to complete, or a delay in completing, interconnection or Electric System Upgrades by the Commercial Operation Milestone except to the extent that such delay is solely caused by a Force Majeure;
- (b) a strike, work stoppage or labor dispute;
- (d) Seller's failure to obtain additional funds, including funds authorized by a state or the federal government or agencies thereof, to supplement the payments made by Buyer pursuant to this Agreement;
- (e) Seller's inability to obtain Permits of any type, except where such failure is solely caused by a Force Majeure Event;
- (f) a Forced Outage except where such Forced Outage is caused by an event of Force Majeure;
- (g) a Curtailment Order; or
- (h) economic conditions that render a Party's performance of this Agreement at the Contract Price unprofitable or otherwise uneconomic, including buyer's ability to buy Energy at a lower price, or Seller's ability to sell Energy generated by the Facility at a higher price).

**Forced Outage:** Any unplanned reduction or suspension of the Energy from the Facility or unavailability of the Product in whole or in part from a unit in response to a mechanical, electrical, or hydraulic control system trip or operator-initiated trip in response to an alarm or equipment malfunction and any other unavailability of a unit for operation, in whole or in part, for maintenance or repair that is not a Planned Outage and not the result of Force Majeure.

**Full Capacity Deliverability Status or FCDS:** Has the meaning set forth in the CAISO Tariff.

**Full Capacity Deliverability Status Finding:** A written confirmation from the CAISO that the Facility is eligible for FCDS.

**GAAP or Generally Accepted Accounting Principles:** The standards for accounting and preparation of financial statements established by the Federal Accounting Standards Advisory Board (or its successor agency) or any successor standards adopted pursuant to relevant Securities Exchange Commission rule.

**Gains:** With respect to any Party, an amount equal to the present value of the economic benefit to it, if any (exclusive of Costs), resulting from the termination of the Agreement for the remainder of the Term, determined in a commercially reasonable manner, subject to Section 9.3 hereof. Factors used in determining economic benefit may include reference to information either available to it internally or supplied by one or more third parties, including quotations (either firm or indicative) of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets, market price referent, market prices for a comparable transaction, forward price curves based on economic analysis of the relevant markets, settlement prices for a comparable transaction at liquid trading hubs (e.g., NYMEX), all of which should be calculated for the remainder of the Term to determine the value of the Product, including the value of Environmental Attributes and Capacity Attributes.

**GEP Period:** Means successive periods consisting of two (2) consecutive Contract Years with the first GEP Period commencing on the Delivery Start Date, and with each subsequent GEP Period commencing on the twelve (12) month anniversary of the commencement of the prior GEP Period.

**Good Utility Practice:** Has the meaning in the CAISO Tariff.

**Governmental Authority:** Any federal or state government, or political subdivision thereof, including, without limitation, any municipality, township or county, or any entity or authority exercising executive, legislative, judicial, regulatory or administrative functions of or pertaining to government, including, without limitation, the CAISO or any corporation or other entity owned or controlled by any of the foregoing.

**Guaranteed Energy Production, or GEP:** Has the meaning set forth in Section 3.4(a).

**Guarantor:** Means, with respect to Seller, any Person that (a) is reasonably acceptable to Buyer, (b) has a Credit Rating of A- or better from S&P or a Credit Rating of A3 or better from Moody's, (c) is incorporated or organized in a jurisdiction of the United States and is in good standing in such jurisdiction, and (d) executes and delivers a Guaranty for the benefit of Buyer.

**Guaranty:** Means a guaranty from a Guarantor provided for the benefit of Buyer as reasonably acceptable to Buyer.

**Indemnified Party:** Has the meaning set forth in Section 10.1.

**Indemnifying Party:** Has the meaning set forth in Section 10.1.

**Installed Capacity:** Means the actual generating capacity of the Facility, measured at the Facility PNode and adjusted for ambient conditions on the date of the performance test, as set forth in Exhibit G.

**Interconnection Agreement:** The agreement and associated documents (or any successor agreement and associated documentation) by and among Seller, the Participating TO and the CAISO governing the terms and conditions of Seller's interconnection with the CAISO grid, including any description of the plan for interconnection of the Facility to the Participating TO's system.

**Interconnection Facilities:** Has the meaning set forth in the CAISO Tariff.

**Inter-Scheduling Coordinator or Inter-SC Trades:** Has the meaning set forth in the CAISO Tariff.

**Late Payment Penalty:** Has the meaning set forth in Section 4.1(b).

**Lender(s):** Any Person(s) providing money or extending credit (including any capital lease) to Seller, including in the form of debt or tax equity, for (a) the construction of the Facility, (b) the term or permanent financing of the Facility, or (c) working capital or other ordinary business requirements for the Facility. "Lender(s)" shall not include any trade creditor(s) of Seller.

**Letter of Credit:** An irrevocable, non-transferable standby letter of credit issued by an Eligible LC Bank in a form that is substantially similar to the form contained in Exhibit K-1. Costs of a Letter of Credit shall be borne by the applicant for such Letter of Credit.

**Licensed Professional Engineer:** A Person acceptable to Buyer in its reasonable judgment who (a) is licensed to practice engineering in California, (b) has training and experience in the power industry specific to the technology of the Facility, (c) has no economic relationship, association, or nexus with Seller or Buyer, other than to meet the obligations of Seller pursuant to this Agreement, (d) is not a representative of a consultant, engineer, contractor, designer or other individual involved in the development of the Facility or of a manufacturer or supplier of any equipment installed at the Facility, and (e) is licensed in an appropriate engineering discipline for the required certification being made.

**LMP:** Has the meaning set forth in the definition of DA Price.

**Losses:** With respect to any Party, an amount equal to the present value of the economic loss to it, if any (exclusive of Costs), resulting from the termination of this Agreement for the remainder of the Term, determined in a commercially reasonable manner, subject to Section 9.3 hereof. Factors used in determining the loss of economic benefit may include reference to information either available to it internally or supplied by one or more third parties, including quotations (either firm or indicative) of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets, market price referent, market prices for a comparable transaction, forward price curves based on economic analysis of the relevant markets, settlement prices for a comparable transaction at liquid trading hubs (e.g. NYMEX), all of which should be calculated for the remainder of the Term to determine the value of the Product, including Environmental Attributes and Capacity Attributes. If the Non-Defaulting Party is the Seller, then in addition to lost payments for Product pursuant to this Agreement, "Losses" shall exclude any associated loss of investment tax credits and other lost tax benefits.

**Major Equipment Milestone:** Has the meaning set forth in Section 5.3(b)(ii).

**Milestones:** The key development activities required for the construction and operation of the Facility, as set forth more particularly in Section 5.3(b).

**MWh:** Mega-watt hour.

**NERC:** Means the North American Electric Reliability Corporation or a successor organization.

**Negative LMP:** In any Settlement Interval in the Day-Ahead Market or Real-Time Market, the LMP at the Delivery Point is less than zero dollars (\$0).

**Network Upgrades:** Has the meaning set forth in the CAISO Tariff.

**Non-Defaulting Party:** Has the meaning set forth in Section 9.2(a).

**Notice to Proceed:** The full notice to proceed provided by Seller to the EPC Contractor following execution of the EPC Contract between Seller and such EPC Contractor and satisfaction of all conditions to performance of such contract, by which Seller authorizes such EPC Contractor to begin construction of the Facility without any delay or waiting periods.

**Participating Transmission Owner or PTO:** Has the meaning set forth in the CAISO Tariff. The PTO is \_\_\_\_\_.

**Parties:** Buyer and Seller, and their respective successors and permitted assignees.

**Party:** Buyer or Seller, and each such Party's respective successors and permitted assignees.

**Performance Assurance:** The collateral provided by Seller to Buyer to secure Seller's obligations hereunder in accordance with Section 6.2(a)(ii) of this Agreement.

**Performance Liquidated Damages or Performance LDs:** Has the meaning set forth in Section 3.4(c).

**Permits:** All material federal, state or local authorizations, certificates, permits, licenses and approvals required by any Governmental Authority for the construction, ownership, operation and maintenance of the Facility, including any such permits or approvals required under CEQA or the National Environmental Policy Act, 42 U.S.C. Sections 4321 et. seq.

**Permitted Extensions:** Has the meaning set forth in Section 5.4(a).

**Person:** An individual, partnership, corporation, business trust, limited liability company, joint stock company, trust, unincorporated association, joint venture, Governmental Authority or other entity.

**Planned Outage:** The removal of equipment from service availability for inspection and/or general overhaul of one or more major equipment groups. To qualify as a Planned Outage, the maintenance (a) must actually be conducted during the Planned Outage, and in Seller's sole discretion must be of the type that is necessary to reliably maintain the Facility, (b) cannot be reasonably conducted during Facility operations, and (c) causes the generation level of the Facility to be reduced by at least ten percent (10%) of the Initial Capacity.

**PNode:** Has the meaning set forth in the CAISO Tariff.

**Point of Interconnection:** The point on the electrical system where the Facility is physically interconnected with the PTO System.

**Pre-FCDS Energy Price:** Has the meaning set forth in Section 3.2(c).

**Product:** The Energy, Environmental Attributes, Capacity Attributes, Ancillary Services, and any and all other reliability, power, or environmental attributes which are or can be produced by or associated with the Facility.

**Progress Report:** Means the report described in Exhibit F-1.

**PTO System:** The transmission system owned by the Participating Transmission Owner.

**Public Records Laws:** Means the California Public Records Act, California Government Code Sections 6250 et seq., and the San Francisco Sunshine Ordinance, San Francisco Administrative Code, Chapter 67, the Ralph M. Brown Act, California Government Code Sections 54950, et seq., and any other applicable law regarding public records as may be amended from time to time.

**Real-Time Market:** Has the meaning set forth in the CAISO Tariff.

**REC or Renewable Energy Credit:** Has the meaning set forth in California Public Utilities Code Section 399.12(h) and CPUC Decision 08-08-028, as may be amended from time to time or as further defined or supplemented by applicable law.

**Replacement RA Capacity:** Means RA Capacity provided by Seller prior to a FCDS finding for the Facility. The Replacement RA Capacity shall have the same or similar locational attributes to be provided by the Facility under this Agreement and comply with the requirements of Exhibit N.

**Replacement Price:** Means, in MWh, Buyer's actual, reasonable cost of Replacement Product plus five percent (5%).

**Replacement Product:** Means energy produced from a facility other than the Facility that at the time of delivery to Buyer qualifies as an ERR and which (1) has the same or similar Environmental Attributes, including RECs, that would have been generated by the Facility during the Contract Year for which the Replacement Product is provided, and (2) equivalent Capacity Attributes that would have been provided by the Facility during the Contract Year for which the Replacement Product is provided.

**Resource Adequacy:** The resource adequacy capacity requirements established for load serving entities by the CPUC pursuant to the CPUC Decisions D.04-01-050, 04-10-035 and 05-10-042, 06-04-040, 06-06-064, 06-07-031, 07-06-029, 08-06-031, 09-06-028, 10-06-036, 11-06-022, 12-06-025, 13-06-024, and any other existing or subsequent decisions, resolutions or rulings addressing Resource Adequacy issues, as those obligations may be altered from time to time, the flexible capacity standards under the CAISO Tariff, or by any other Governmental Authority having jurisdiction.

**RPS:** Means the California Renewable Portfolio Standard as set forth in California Public Utilities Code Sections 399.11 et. seq. and California Public Resources Code Sections 25740, et. seq., as such provisions are amended or supplemented from time to time.

**Scheduling Coordinator:** Has the meaning set forth in the CAISO Tariff.

**Seller:** Has the meaning in the Preamble, and any successor or permitted assignee.



**Seller Excused Hours:** For each GEP Period, an amount expressed in MWh, equal to the aggregate amount of reduction(s) in delivered Product during such GEP Period as a result of Curtailment Orders, Discretionary Curtailment, Force Majeure Events, Buyer's breach or default hereunder or failure to accept delivered Product, or Forced Outages to the local transmission or distribution system.

**Settlement Interval:** Has the meaning set forth in the CAISO Tariff.

**SFPUC:** The San Francisco Public Utilities Commission.

**Site:** The location of the Facility as described on Exhibit B.

**Site Drawings:** Has the meaning set forth on Exhibit B.

**Surplus Energy:** Has the meaning set forth in Section 3.2(d).

**System Emergency:** Has the meaning set forth in the CAISO Tariff.

**Termination Payment:** With respect to the Non-Defaulting Party, the sum of (a) the Losses or Gains, and Costs, which such Party incurs as a result of the termination of this Agreement pursuant to Section 9.3, plus (b) the sum of all amounts then owed to the Non-Defaulting Party by the defaulting Party determined as of the Early Termination Date.

**Test Energy:** Product (to the extent available) generated by the Facility and delivered to the Point of Interconnection prior to the Delivery Start Date.

**WECC:** Means the Western Electricity Coordinating Council or successor agency.

**WREGIS:** The Western Renewable Energy Generation Information System, or any successor renewable energy tracking program.

**WREGIS Certificate:** Has the meaning set forth in the WREGIS Operating Rules and are designated as eligible for compliance with the California RPS.

**WREGIS Certificate Deficit:** Means any deficit or shortfall in WREGIS Certificates delivered to Buyer for a calendar month as compared to the delivered Product for the same calendar month, after taking into account applicable delays in the issuance of WREGIS Certificates or otherwise arising under WREGIS Operating Rules.

**WREGIS Operating Rules:** Means those operating rules and requirements adopted by WREGIS as of December 2010, as subsequently amended, supplemented or replaced from time to time.

## ARTICLE 2: CONDITIONS PRECEDENT AND TERM

### 2.1 Conditions Precedent to Commencement of Term of Agreement.

- (a) Conditions Precedent. The Term of this Agreement shall not commence until the occurrence of all of the following:
- (i) Buyer receives from Seller the conditions precedent documentation listed in Exhibit A; and
  - (ii) Buyer receives from Seller the Development Assurance; and
  - (iii) This Agreement has been approved, if required, by the San Francisco Public Utilities Commission and the San Francisco Board of Supervisors; and
  - (iv) The Controller has certified in accordance with the City's Charter that sufficient unencumbered balances are available in the proper fund.
- (b) Effective Date. The Effective Date of this Agreement shall be the date that the all of the Conditions Precedent set forth in Section 2.1(a) have been satisfied or waived in writing by both Parties.

- (c) Failure to Meet All Conditions Precedent. If the Conditions Precedent set forth in Sections 2.1(a) are not satisfied or waived in writing by both Parties within ninety (90) Business Days of full execution of this Agreement, then either Party may terminate this Agreement effective upon receipt of notice by the other Party. Neither Party shall have any obligation or liability to the other, including for a Termination Payment or otherwise, as a result of such termination and Buyer shall return Development Assurance to Seller.

## 2.2 Agreement Term, Delivery Term, and Extension.

- (a) Agreement Term. The term of this Agreement shall commence, and this Agreement shall be effective, upon the Effective Date and, unless earlier terminated pursuant to an express provision of this Agreement, shall remain in effect until the delivery to Buyer of all of the Environmental Attributes under this Agreement (the "Term").
- (b) Delivery Term.
- (i) The Delivery Term shall commence on the first date that Buyer accepts delivery of the Product from the Facility under this Agreement (the "Delivery Start Date") and continuing for \_\_\_\_\_ years ("Delivery Term"), unless terminated as provided by the terms of this Agreement.
- (ii) The Delivery Start Date shall occur as soon as practicable once all of the following have been satisfied, but no later than ninety (90) days after the COD:
- (A) Seller notifies Buyer of the Commercial Operation Date by delivering to Buyer the COD Certification set forth at Exhibit H-2, and the Installed Capacity Certification set forth at Exhibit J-1, and, if applicable, an updated Contract Quantity table in the form attached hereto as Exhibit C based on the Installed Capacity;
- (B) Seller notifies Buyer of the Delivery Start Date by delivering the Delivery Start Date Confirmation attached hereto as Exhibit I;
- (C) Seller has obtained the precertification approval component of the CEC Certification requirement for the Facility;
- (D) all of the applicable Conditions Precedent in Section 2.1(a) have been satisfied or waived in writing;
- (E) Seller has demonstrated satisfaction of Seller's other obligations under this Agreement that commence prior to or as of the Delivery Term, including taking all necessary steps to allow the RECs from the Facility to be tracked in WREGIS and transferred to Buyer and has taken all other similar requirements applicable to Seller to enable Buyer to fulfill its RPS requirements; and
- (F) Seller has delivered Performance Assurance to Buyer.
- (iii) If Seller is unable to commence deliveries of Product under this Agreement within ninety (90) days of COD, Seller may request an extension of the Delivery Start Date by providing written notice to Buyer of the reasons for the delay and the term of the proposed extension no later than ten (10) Business Days prior to the expected Delivery Start Date. Buyer may grant the extension request at its sole discretion.
- (iv) Seller shall take all necessary actions to obtain final CEC Certification of the Facility and creation of retroactive WREGIS RECs within one hundred and eighty (180) calendar days of the COD.

- (c) Extension of End of Delivery Term. At its sole discretion, Buyer may provide notice to Seller no later than XXX (XX) months prior to the end of Delivery Term of its intent to extend the Delivery Term of this Agreement (“Extended Delivery Term”). Buyer and Seller shall promptly enter into good faith negotiations on the price and term for the Extended Delivery Term. If the Parties are unable to reach agreement within ninety (90) calendar days of notice under this Section, neither Party shall have any further obligation to negotiate for an Extended Delivery Term and Seller may enter into negotiations with third parties.

### ARTICLE 3: PURCHASE AND SALE

#### 3.1 Purchase and Sale of Product.

- (a) Transaction. During the Delivery Term, Seller shall sell and deliver, or cause to be delivered, and Buyer shall purchase and receive, or cause to be received, the Product at the Delivery Point, and Buyer shall pay Seller for delivered Product in accordance with the terms of this Agreement, unless specifically excused by the terms of this Agreement. Except for Replacement Product and Replacement RA Capacity, in no event shall Seller have the right to procure any element of the Product from sources other than the Facility for sale or delivery to Buyer under this Agreement, or sell Product from the Facility to a third party (Subject to Sections 3.4(d) and (e), and 3.9). Buyer shall have no obligation to receive or purchase Product from Seller prior to or after the Delivery Term, except for Test Energy.
- (b) Title and Risk of Loss. Title to and risk of loss as to all Product purchased by Buyer shall pass from Seller to Buyer at the Delivery Point. Seller shall be responsible for any costs, fees, taxes, assessments, or charges associated with the Product or the delivery of the Product up to the Delivery Point. Buyer shall be responsible for any costs, or charges imposed on or associated with the Product or the delivery of the Product at and from the Delivery Point. Seller warrants that it shall deliver all Product to Buyer free and clear of all liens, security interests, claims and encumbrances or any interest therein or thereto created by any Person other than Buyer.

**3.2 Contract Price.** Buyer shall pay Seller \$\_\_\_\_\_ per MWh for Product delivered pursuant to this Agreement and Buyer Curtailed Product. The Contract Price shall be the total compensation owed by Buyer for the Product, adjusted as follows:

- (a) Test Energy Price. For all Test Energy, Buyer shall pay Seller fifty percent (50%) of the Contract Price per MWh.
- (b) Excess Quantity Price. For all Product in excess of one hundred and fifteen percent (115%) of the Expected Energy Production for the then-current Contract Year, Buyer shall pay Seller fifty percent (50%) of the Contract Price.

**OR**

Excess Quantity. Buyer is not obligated to accept delivery of, or pay for, any Product in excess of one hundred and fifteen percent (115%) of the Expected Energy Production for the then-current Contract Year (“Excess Quantity”). Seller shall have the right to sell any Excess Quantity to a third party.

- (c) [IF APPLICABLE] Pre-FCDS Energy Price. For all Product delivered or tendered to Buyer prior to the date on which Seller has obtained a Full Capacity Deliverability Status Finding from the CAISO, Buyer shall pay Seller a price per MWh of Product equal to eighty percent (80%) of the Price.

- (i) Notwithstanding the foregoing, Seller may elect to provide Replacement RA Capacity during the Pre-FCDS period by providing written notice to Buyer within thirty (30) calendar days prior to the Delivery Start Date including a completed Exhibit N.
  - (ii) If Seller provides Replacement RA Capacity, Buyer shall pay the Contract Price for the Product.
- (d) Surplus Energy Price. If during any Settlement Interval, Seller delivers Product amounts in excess of the Contract Capacity (“Surplus Energy”), then the price applicable to all such excess MWh in such Settlement Interval shall be zero dollars (\$0), and if there is a Negative LMP during such Settlement Interval, Seller shall pay to Buyer an amount equal to the Negative LMP times the amount of the Surplus Energy in MWh.

**3.3 Contract Quantity.** The Contract Quantity for Product is set forth in Exhibit C.

- (a) Capacity. [amend if purchasing less than 100% of output]
  - (i) As of the Execution Date, the Expected Initial Capacity of the Facility as of the Commercial Operation Date is \_\_\_\_\_ MW AC, net of all auxiliary loads, station electrical uses, and electrical losses.
  - (ii) Seller shall use commercially reasonable efforts to ensure that the Installed Capacity of the Facility as of the Commercial Operation Date is same as the Expected Initial Capacity, but in no event shall be less than \_\_\_\_\_ MW AC or more than \_\_\_\_\_ MW AC, and shall be determined based upon the sum of the nameplate ratings (AC) of all Facility inverters. If applicable, Seller shall update the Contract Quantity table in Exhibit C to reflect the Facility’s Installed Capacity pursuant to Section 2.3(b)(ii)(A).

Test Energy. For a period of up to ninety (90) days prior to the commencement of the Delivery Term, Buyer shall purchase and accept from Seller at the Delivery Point, the Product relating to any Test Energy pursuant to the terms of this Agreement; provided that the decision to produce and deliver Test Energy hereunder shall be at the sole discretion of Seller. All Test Energy shall be scheduled in accordance with Section 5.6 and the protocols set forth in Exhibit E.

**3.4 Guaranteed Energy Production.**

- (a) Guaranteed Energy Production. For each GEP Period throughout the Term, Seller shall deliver no less than one hundred and sixty percent (160%) of (i) the Contract Quantity for the GEP Period, minus (ii) the Seller Excused Hours (“Guaranteed Energy Production” or “GEP”).
- (b) Reporting. No less frequently than quarterly during each year, Seller shall calculate and provide notice to Buyer of the then-cumulative amount of the Seller Excused Hours for such year, along with an explanation in reasonable detail of the calculation thereof based on historical Facility data, meteorological data, Product projections (including by the CAISO, if applicable) and other relevant data. The calculation shall be subject to review and approval by Buyer.
- (c) Performance LDs. If Seller fails to meet the GEP, then within sixty (60) days after the end of the relevant GEP Period Buyer shall notify Seller of the quantity of the shortfall and the amount of the Performance LDs. Within thirty (30) days after the receipt of notice of the shortfall, Seller shall either (1) provide Replacement Product in the amount of the GEP shortfall, or (2) pay Buyer Performance LDs calculated as: the positive difference obtained by subtracting the (i) Contract Price from (ii) the Replacement Price, multiplied by the GEP shortfall. The Parties agree that, consistent

with Section 9.3(b), the damages Buyer would incur due to Seller's failure to meet the GEP would be difficult or impossible to predict with certainty and the Performance LD amount is a reasonable approximation of such damages.

If within ten (10) Business Days of receipt of notice of a GEP shortfall, Seller does not either provide notice to Buyer of its election to provide Replacement Product or deliver payment of the Performance LD amount to Buyer, Buyer shall be entitled to collect Performance LDs by electing, in its sole discretion, one or more of the following payment methods:

- (i) drawing upon the Performance Assurance; and/or
  - (ii) setting off against any amounts owed to Seller by Buyer under this Agreement.
- (d) Seller may, as an alternative to payment of Performance LDs pursuant to this section, provide Replacement Product within ninety (90) days after the conclusion of the applicable GEP Period but within the same calendar year as the conclusion of the applicable GEP Period. The Replacement Product shall be delivered to Buyer at the NP 15 EZ Gen Hub upon a schedule reasonably acceptable to Buyer. Buyer will pay Seller for all such Replacement Product provided pursuant to this Section 3.4(d) at the lower of: (1) the Contract Price, or (2) the hourly DA price at the Delivery Point for the Replacement Product.
- (e) Notwithstanding any other provision of this Agreement, if in any consecutive three (3) month period of the Term of the Agreement, the actual Product deliveries are less than fifty percent (50%) of the monthly quantities set forth in the Seller's Annual Forecast for that three (3) month period minus any Seller Excused Hours for that month, Buyer shall have the right to require Seller to provide Replacement Product as set forth in Section 3.4(d). Pursuant to Section 9.1(b)(iii), Seller's failure to deliver at least fifty percent (50%) expected monthly quantities, excluding Seller Excused Hours, for twelve (12) consecutive months shall constitute a default of this Agreement.

### 3.5 Environmental Attributes.

- (a) Purchase and Sale of Environmental Attributes. During the Term, Seller shall sell and transfer to Buyer, and Buyer shall purchase and receive from Seller, all right, title and interest in and to the Environmental Attributes associated with Delivered Energy, whether now existing or subsequently created by a Governmental Authority after the Execution Date. Seller shall, at its sole expense, take all actions and execute all documents or instruments necessary to transfer all rights, title, and interest in and to the Environmental Attributes, whether now existing or that come into existence in the future, associated with the Delivered Energy. Seller shall transfer and make such Environmental Attributes available to Buyer as soon as practicable upon Seller's production of the Environmental Attributes.
- (b) Buyer's Right to Report Ownership of Environmental Attributes. Seller shall not report to any Person or entity that the Environmental Attributes belong to anyone other than Buyer, and Buyer may report under any program that such Environmental Attributes purchased hereunder belong to it.
- (c) Renewable Energy Credits. Seller shall, at its sole expense take all actions and execute all documents or instruments necessary to ensure that all WREGIS Certificates associated with all Renewable Energy Credits corresponding to all Delivered Energy are issued and tracked for purposes of satisfying the applicable requirements of the California RPS and transferred within three (3) months of creation to Buyer for Buyer's sole benefit. Seller shall comply with all Applicable Laws, including, without limitation, the WREGIS Operating Rules, regarding the certification and transfer of such WREGIS Certificates to Buyer.

- (i) Seller shall cause REC transfers to occur on a monthly basis in accordance with the certification procedure established by the WREGIS Operating Rules. Any fractional MWh amounts shall be carried forward until sufficient generation is accumulated for the creation of a WREGIS Certificate.
- (ii) Due to the delay in the creation of WREGIS Certificates relative to the timing of the monthly invoice payment under this Agreement, Buyer may make an invoice payment for a given month before the WREGIS Certificates for such month are formally transferred to Buyer in accordance with the WREGIS Operating Rules. Notwithstanding this delay, Buyer shall have all right and title to all such WREGIS Certificates upon payment to Seller.
- (iii) Seller shall, at its sole expense, ensure that the WREGIS Certificates for a given calendar month correspond with the Delivered Energy for such calendar month. If any WREGIS Certificate Deficit is caused by, or the result of any action or inaction, by Seller, then the amount of Delivered Energy in such calendar Month (“the Deficient Month”) shall be reduced by the amount of the WREGIS Certificate Deficit for the purposes of calculating Buyer’s payment(s) to Seller under Article 4 and the Guaranteed Energy Production for the applicable GEP Period. Any amount owed by Seller to Buyer because of a WREGIS Certificate Deficit shall be made as an adjustment to Seller’s next monthly invoice to Buyer in accordance with Article 4, and Buyer shall net such amount against Buyer’s subsequent payment(s) to Seller.
- (iv) Without limiting Seller’s obligations, to the extent a WREGIS Certificate Deficit is caused by an error or omission of WREGIS, the Parties shall cooperate in good faith to cause WREGIS to correct its error or omission.
- (v) If WREGIS changes the WREGIS Operating Rules after the Execution Date or applies the WREGIS Operating Rules in a manner inconsistent with this Agreement, the Parties promptly shall modify this Agreement as reasonably required (i) to cause and enable Seller to transfer to Buyer’s WREGIS Account a quantity of WREGIS Certificates for each given calendar month that corresponds to the Delivered Energy in the same calendar month, or (ii) as may otherwise be reasonably appropriate to address such inconsistency.

### 3.6 Resource Adequacy.

- (a) Full Capacity Deliverability Status. [IF APPLICABLE] Seller shall be solely responsible for, and take all necessary actions to obtain a Full Capacity Deliverability Status Finding for the Facility prior to the Delivery Start Date.
- (b) Resource Adequacy Requirements. During the Delivery Term, Seller grants, pledges, assigns and otherwise commits to Buyer all of the Facility’s Installed Capacity, including Capacity Attributes, to enable Buyer to meet its Resource Adequacy or successor program requirements, as the CPUC, CAISO and/or other regional entity may prescribe, including submission of a supply plan or Resource Adequacy plan. From the Execution Date, and for the duration of the Delivery Term, Seller shall take all commercially reasonable actions, including complying with all applicable registration and reporting requirements, and executing any and all documents or instruments necessary to enable Buyer to use all of the Installed Capacity of the Facility, including Capacity Attributes, to be committed by Seller to Buyer pursuant to this Agreement to meet Buyer’s Resource Adequacy requirements during the Delivery Term. [Amend if purchasing less than 100% of output]
- (b) Availability Standards. Seller shall be responsible for all costs, charges, expenses, penalties, and obligations resulting from Availability Standards, if applicable, and Seller shall be entitled to retain all credits, payments, and revenues, if any, resulting from Seller achieving or exceeding Availability Standards, if applicable.

**3.7 Compliance Cost Cap.** If Seller establishes to Buyer's reasonable satisfaction that a change in Applicable Law has occurred after the Effective Date that results in Compliance Costs as defined in Section 3.7(a), then Seller's Compliance Costs during the Delivery Term shall be capped annually at five thousand dollars (\$5,000.00) per MW of Installed Capacity and in the aggregate throughout the Delivery Term at twenty thousand dollars (\$20,000.00) per MW of Installed Capacity ("Compliance Cost Cap").

- (a) This Section shall apply to Seller's additional, reasonable out-of-pocket costs paid to third parties for obtaining, maintaining, conveying, or complying with: (i) CEC Certification, (ii) Environmental Attributes including WREGIS certificates, and (iii) Capacity Attributes ("Compliance Costs"). Compliance Costs includes only those new costs associated with the change in Applicable Law after the Execution Date that are in excess of the reasonably anticipated compliance costs as of the Execution Date.
- (b) In the event that the Compliance Costs exceed the Compliance Cost Cap, Buyer shall either reimburse Seller for such Compliance Costs that exceed the Compliance Cost Cap, or excuse Seller from performing those obligations that cause the Compliance Costs to exceed the Compliance Cost Cap.
- (c) Seller shall notify Buyer within sixty (60) calendar days after the applicable Change in Law if it anticipates that its Compliance Costs will exceed the Compliance Cost Cap and an estimate of the Compliance Costs. Buyer shall notify Seller within thirty (30) calendar days of receipt of the notice whether Buyer (i) agrees to reimburse Seller for the additional costs, or (ii) waives Seller's performance of such obligations.

**3.8 Tax Credits and Incentives.** Buyer acknowledges and agrees that all tax credits, deductions, and incentives related to the generation and sale of Energy or investments in the Facility shall be owned by Seller, including tax credits available under Section 45 of Subtitle A, Chapter 1A, Part IV and Section 48(a)(3)(A)(i) and 48(a)(5) of the Internal Revenue Code of 1986 or any successor law. Buyer agrees to cooperate with Seller, as may be necessary, to allow maximization of the value of, and realization of, all such tax credits and incentives; provided that Buyer shall not be required to incur additional costs or accept any diminution in value of its rights under this Agreement or of the Product purchased hereunder. In addition, Buyer shall not take any action (except as otherwise permitted under this Agreement), that would in any way reduce or eliminate the availability to Seller of any such tax credits and incentives. Notwithstanding the foregoing, Seller's rights under this section shall not include anything that qualifies as Product (including any Environmental Attributes).

**3.9 Expansion Facility and Expansion Facility Product.**

- (a) Buyer's Right of First Refusal. During the Term, Seller may, at its sole discretion, develop, finance, construct, and/or operate an Expansion Facility. Each time such a determination is made, Seller shall notify Buyer of such determination and shall offer, in writing, to sell the Expansion Facility Product to Buyer. The offer shall include the price to be paid by Buyer for the Expansion Facility Product, the term, and other principal terms and conditions of the proposed sale. If Buyer wishes to accept such offer to purchase all (but not less than all) of the Expansion Facility Product, Buyer shall so notify Seller within ninety (90) calendar days of its receipt of such offer. Buyer and Seller shall promptly thereafter enter into good faith negotiation of commercial modifications to this Agreement incorporating such Expansion Facility Product offer.
- (b) Buyer's Right to Purchase Expansion Facility Product. If Buyer does not accept Seller's offer to purchase the Expansion Facility Product within ninety (90) calendar days of receipt of Seller's offer, Seller shall be deemed authorized to offer to sell that portion of the Expansion Facility Product to one or more third parties at a price and on other terms and conditions which, taken as a whole, are at least as favorable to Seller as the price and other terms and conditions set forth in Seller's offer to Buyer. If Seller offers to disaggregate the Expansion Facility Product for the purpose of selling the same to multiple independent buyers, Seller shall notify Buyer, in writing, of the terms

and conditions of such offers, and Buyer shall again have the right of first refusal consistent with the terms set forth above for each of the lesser amounts being offered to the third parties. If Buyer does not purchase the Expansion Facility Product and Seller sells such Expansion Facility Product to a third party, Seller shall promptly certify, in writing, to Buyer that the terms and conditions of sale of such Expansion Facility Product to such third party, taken as a whole, are at least as favorable to Seller as the price and other terms and conditions set forth in Seller's offer to Buyer, and, Seller shall provide the relevant final contract and any other supporting documentation for such certification by Buyer. Upon the sale of such Expansion Facility Product in compliance with this Agreement, Buyer shall have no further rights to be offered or to purchase such Expansion Facility Product. Buyer's refusal, in writing, of the Expansion Facility Product from one Expansion Facility shall not affect Buyer's right to purchase the Expansion Facility Product from a subsequently developed Expansion Facility under the terms of this Agreement. Notwithstanding any provision to the contrary herein, Seller shall not sell or provide the Expansion Facility Product to any third party, unless Seller can do so without compromising in any material way its ability to provide the Product or Expansion Facility Product, if any, to Buyer hereunder. The materiality of any such impact shall be determined by Buyer, acting in its reasonable discretion.

**3.10 Refurbishment of the Facility.** During the Term, Seller may not refurbish the Facility, alter components of the Facility, replace components of the Facility, add additional [solar modules or inverters, or replace solar modules or inverters with more powerful solar modules or inverters], to increase capacity higher than the Installed Capacity without the prior written consent of Buyer, and Buyer shall have the right, in its sole discretion, to accept or decline to permit any such refurbishment or alteration that may increase capacity of the Facility above the Installed Capacity. **[Delete if purchasing less than full output]**

#### ARTICLE 4: BILLING, PAYMENT, AND CERTIFICATION

##### 4.1 Billing and Payment.

- (a) Monthly Invoices. Seller shall provide to Buyer no sooner than the tenth (10<sup>th</sup>) day of each month an invoice for the Product and Buyer Curtailed Product for the prior month based upon meter data for Energy delivered in such calendar month. All Energy purchased under this Agreement must be measured by the Facility's CAISO revenue meter to be eligible for payment under this Agreement. The invoice shall include:
- (i) the hourly quantities of Energy delivered in the prior month based on CAISO metering and settlement data ("Delivered Energy");
  - (ii) a calculation of the monthly payment based on the Contract Price and the Excess Energy Price, and the quantity of Delivered Energy and Buyer Curtailed Product, if any,
  - (iii) credits for WREGIS Certificate Deficits pursuant to Section 3.5 (c)(iii), if any, and;
  - (iv) amounts of Surplus Energy and the LMP at the Delivery Point.
- (b) Payment. All invoices shall be due and payable on or before the thirtieth (30<sup>th</sup>) day after receipt of the invoice or, if such day is not a Business Day, then on the next Business Day ("Due Date"). Any amount not paid by the Due Date shall be considered late and Buyer shall pay a Late Payment Penalty equal to a daily rate of five dollars and fifty cents (\$5.50) per one hundred thousand dollars (\$100,000) on the unpaid balance for a maximum period of ninety (90) days after the Due Date ("Late Payment Penalty").



- (c) City Vendor Requirements. Notwithstanding any other provision of this Agreement, Buyer shall not be deemed to be in default of this Agreement and no Late Payment Penalty shall be assessed if an invoice under this Agreement cannot be processed by Buyer due to Seller's failure to comply with all applicable City requirements for City contractors, including but not limited to certification of vendors under Chapter 12 of the San Francisco Administrative Code, payment of business license fees or taxes, insurance requirements, registration in the City's vendor payment processing system, or any other current or future City requirement for vendor payment processing. Seller understands and acknowledges that vendor certifications may include annual renewals and additional certification requirements may apply to assignees or changes in ownership or control of Seller.
- (d) Disputes and Adjustments of Invoices. A Party may, in good faith, dispute the correctness of any invoice or any adjustment to an invoice, rendered under this Agreement or adjust any invoice for any arithmetic or computational error within twelve (12) months of the date the invoice, or adjustment to an invoice, was rendered. In the event an invoice or portion thereof, or any other claim or adjustment arising hereunder, is disputed, payment of the undisputed portion of the invoice shall be required to be made when due, with notice of the objection given to the other Party. Any invoice dispute or invoice adjustment shall be in writing and shall state the basis for the dispute or adjustment. Payment of the disputed amount shall not be required until the dispute is resolved. Upon resolution of the dispute, any required payment shall be made within five (5) Business Days of such resolution along the Late Payment Penalty from and including the due date to but excluding the date paid. Inadvertent overpayments shall be returned upon request or deducted by the Buyer from subsequent payments. Any dispute with respect to an invoice is waived unless the other Party is notified in accordance with this Section 4.1(d) within twelve (12) months after the invoice is rendered or any specific adjustment to the invoice is made. If an invoice is not rendered within twelve (12) months after the close of the month during which delivery of Product occurred, the right to payment for such delivery is waived.
- (e) CAISO Adjustments. If the CAISO makes any adjustment to any CAISO meter data for a given time period, Seller agrees that it shall submit revised monthly invoices, pursuant to Section 4.1, covering the entire applicable time period in order to conform fully such adjustments to the meter data. Seller shall submit any such revised invoice no later than thirty (30) days from the date on which the CAISO provides to Seller such binding adjustment to the meter data.

#### 4.2 Designated Fund.

- (a) Auto-Appropriating Designated Fund. Buyer's payment obligations under this Agreement shall be paid from a SFPUC designated fund that will automatically appropriate CleanPowerSF revenues on an annual basis without further Buyer action and which shall be used solely for CleanPowerSF costs and expenses, including the obligations under this Agreement. Buyer agrees to establish CleanPowerSF rates and charges that are sufficient to maintain revenues necessary to pay its obligations under this Agreement and all of Buyer's payment obligations under its other contracts for the purchase of energy for CleanPowerSF. Buyer shall provide Seller with reasonable access to account balance information with respect to the SFPUC designated fund at all times during the Delivery Term.
- (b) Limited Obligations. Buyer's payment obligations are special limited obligations of the Buyer payable solely from the revenues of CleanPowerSF. Buyer's payment obligations under this Agreement are not a charge upon the revenues or general fund

of the SFPUC or the City and County of San Francisco or upon any non-CleanPowerSF moneys or other property of the SFPUC or the City.

#### 4.3 **Guaranteed Maximum Costs.**

- (a) Controller Certification. The Buyer's obligations hereunder shall not at any time exceed the amount certified by the Controller for the purpose and period stated in such certification. Except as may be provided by laws governing emergency procedures, officers and employees of Buyer are not authorized to request, and Buyer is not required to reimburse Seller for, commodities or services beyond the agreed upon Agreement scope unless the changed scope is authorized by amendment and approved as required by law. Officers and employees of Buyer are not authorized to offer or promise, nor is Buyer required to honor, any offered or promised additional funding in excess of the maximum amount of funding for which the contract is certified without certification of the additional amount by the Controller. The Controller is not authorized to make payments on any contract for which funds have not been certified as available in the budget or by supplemental appropriation.
- (b) Biannual Budget Process. For each City biannual budget cycle during the term of this Agreement, Buyer agrees to take all necessary action to include the maximum amount of the Buyer's payment obligations under this Agreement in its budget submitted to the Board of Supervisors for that budget cycle.

### **ARTICLE 5: FACILITY DEVELOPMENT, OPERATION, AND MAINTENANCE**

#### 5.1 **General Obligations.**

- (a) Records. Seller shall keep complete and accurate operating and other records and all other data for the purposes of proper administration of this Agreement, including such records as may be required by any Governmental Authority or Good Utility Practice;
- (b) Further Development Information. Seller shall provide to Buyer such other information regarding the permitting, engineering, construction or operations of the Facility as Buyer may from time to time reasonably request, subject to licensing or other restrictions of Seller or a third party with respect to confidentiality, disclosure or use; provided, nothing herein shall limit Buyer's right to obtain such information upon agreeing to confidentiality or signing a confidentiality agreement with regard to such information;
- (c) CAISO Agreements. Seller shall enter into any agreements with the CAISO required by the CAISO for generators delivering power into the CAISO-controlled grid;
- (d) Insurance. Seller shall obtain and maintain the policies of insurance in the amounts and with the coverages as set forth on Exhibit D.
- (e) Vendor Certification. Seller shall obtain, renew, and maintain, all City required vendor certifications and requirements.
- (f) [IF APPLICABLE] Community Benefits. Seller shall comply with the requirements set forth in Exhibit N, Community Benefits Commitments.

**5.2 The Facility.** Throughout the Term of this Agreement, Seller covenants that at its sole cost and expense, unless otherwise specifically stated in this Agreement, it shall:

- (a) Construction. Design, develop, finance, and construct the Facility.
- (b) Prevailing Wages. Pay any person performing labor in the construction of the Facility not less than the prevailing wage rate for the county in which the Facility will be

located, as determined by the California Department of Industrial Relations. Seller shall require in any contract or subcontract related to the construction of the Facility the payment of the prevailing wage rate for the work to be performed. Seller shall provide to Buyer upon request, certified payroll reports with respect to all persons performing labor in the construction of the Facility.

- (c) Compliance with Laws. Seek, obtain, maintain, and comply with all laws, Permits, certificates, agreements, or other authorizations or approvals, which are required for the ownership, construction, operation and maintenance of the Facility and the delivery and sale of the Product pursuant to this Agreement.
- (d) Interconnection and Transmission. Arrange and pay for any and all necessary Electric System Upgrades, obtain any required regulatory approvals, and execute all necessary agreements sufficient to allow Seller to interconnect the Facility to the CAISO Grid and deliver the Product to the Delivery Point by the Delivery Start Date in accordance with this Agreement. Seller shall comply with all applicable requirements, rules, contractual obligations, and Good Utility Practice to maintain any interconnection facilities and to cause delivery of the Product to Buyer.
- (e) **[IF APPLICABLE]** FCDS. Ensure that the interconnection, distribution and/or transmission arrangements for the Facility provide for Full Capacity Deliverability Status as of the Delivery Start Date.
- (f) Notice of Expected Initial Capacity. If applicable, within fifteen (15) calendar days of the later of (i) obtaining the authority to construct for the Facility from the applicable Governmental Authority or (ii) Seller's receipt of the system impact and facility cost studies from the PTO, Seller shall provide written notice to Buyer of any changes to the Initial Capacity of the Facility as set forth in Exhibit B (which shall be subject to the Capacity limits described in Section 3.3(a)(ii)) and specifying other material Facility design details.
- (g) RPS and Green-e® Certification. Prior to the Delivery Start Date and throughout the Delivery Term, take all actions necessary to obtain and maintain for the Facility (i) CEC Certification, (ii) tracking and transfer of RECs associated with the Product in WREGIS, and (iii) Green-e® Energy Certification for renewable energy and greenhouse gas emissions as administered by the Center for Resource Solutions.
- (h) Battery Storage. At the request of Buyer at any time during the Term, Seller shall in good faith evaluate and consider proposals for adding a battery storage unit(s) to the Facility, provided that Seller shall not be required to add any such storage unit(s) to the Facility unless and until Seller, Buyer and any Lenders each (in their sole and absolute discretion) approves the technical details of such unit(s) and appropriate amendments to this Agreement related to such unit(s), including additional compensation related to such unit(s).

### 5.3 Facility Construction and Milestones.

- (a) Time is of the Essence. The Parties agree that time is of the essence in the performance of this Agreement. The Parties further agree that the Milestones must be achieved in a timely fashion or Buyer shall suffer damages which are difficult to estimate with reasonable certainty. Seller shall provide Buyer with any requested information to support the achievement of Milestones within ten (10) Business Days of any request by Buyer.
- (b) Milestone Schedule. Seller covenants that it shall diligently pursue to completion each of the following Milestones: **[MILESTONES MAY CHANGE TO REFLECT DEVELOPMENT STATUS OF FACILITY]**
  - (i) By \_\_\_\_\_, Seller shall have received all final, and non-appealable discretionary authorizations, approvals, waivers, exceptions, variances, filings,

permits, orders, and licenses, including all actions and approvals required under applicable environmental laws, that are required for the construction, use, and operation of the Facility (the "Permitting Milestone");

- (ii) By \_\_\_\_\_, Seller shall have commenced construction of the Facility (the "Construction Milestone") as evidenced by mobilization at the Site by Seller or its agents, including site preparation at a sufficient level to reasonably demonstrate that Seller has commenced preparations for construction of the Facility;
  - (iii) By \_\_\_\_\_, Seller shall have caused on-Site delivery of major components of the Facility, including but not limited to [modules and inverters] [turbines] ("Major Component Milestone"); and,
  - (iv) By \_\_\_\_\_, Seller shall achieve Commercial Operation (the "Commercial Operation Milestone");
- (c) Quarterly Progress Report. Seller shall provide to Buyer a Progress Report concerning the progress towards construction and completion of each of the Milestones (including whether Seller has met or is on target to meet each of the Milestones), which shall be substantially similar in form and substance to that attached as Exhibit F, and include such additional information as reasonably required by Buyer in its sole discretion. Seller shall also agree to meetings between representatives of Buyer and Seller to review such Progress Reports and discuss Seller's construction progress, as Buyer may request from time to time.
- (d) Certification of Completion of Milestone. Except as provided in Section 5.3(f) below, within five (5) Business Days of the completion of each Milestone, Seller shall provide a certification to Buyer (along with any relevant supporting documentation), stating Seller's achievement or satisfaction of each such Milestone.
- (e) Notice of Failure to Achieve Milestone. Upon becoming aware that it shall, or is reasonably likely to, fail to achieve any Milestone by the required date for any reason including a Force Majeure Event, Seller shall notify Buyer in writing as soon as is reasonably practical. Such notice shall provide information regarding the cause of the delay, provide a revised estimated date for achievement of the Milestone(s), and otherwise describe Seller's plan for meeting the Milestone(s). Seller's notice shall also explain any impact such delay may or shall have on any other Milestone, and measures to be taken to mitigate such impact.
- (f) Notice of Commercial Operation Date and COD Certification. Seller shall provide written notice to Buyer thirty (30) calendar days in advance of the anticipated Commercial Operation Date, and shall provide Buyer with written weekly updates thereafter detailing the status of Seller's progress in achieving Commercial Operation. On the Commercial Operation Date, Seller shall deliver to Buyer by electronic mail or facsimile, with originals to follow by hand-delivery, courier or mail service, the COD Certification in the form attached hereto as Exhibit H-2.

#### 5.4 Milestone Excused Delay and Liquidated Damages.

- (a) Permitted Extensions to Milestones. The following events constitute Permitted Extensions:
- (i) In the event that a Force Majeure Event causes a delay to the achievement of any Milestone, each Milestone deadline may be extended by that number of calendar days the applicable Force Majeure Event actually delays completion of such Milestone, provided that Seller works diligently to resolve the effect of the Force Majeure Event on the achievement of the Milestone. Notwithstanding the foregoing, in no event shall the combined extensions

under this Section 5.4(a) for any individual Milestone arising from Force Majeure Events exceed six (6) months in the aggregate.

- (ii) If Seller has used commercially reasonable efforts (including Seller's timely filing of required documents, payment of all applicable fees, and compliance with all applicable CAISO, PTO, FERC, CEC, or other requirements of a Governmental Authority, as applicable), including efforts to obtain Facility interconnection, to meet the Milestones, but such Milestones cannot be met and Seller has worked diligently to resolve the delay, Seller may request Milestone extensions for up to six (6) months in the aggregate, which Buyer may grant in its reasonable discretion.
- (b) Notice. If Seller claims a Permitted Extension, Seller shall provide Buyer with sixty (60) days' notice prior to the applicable Milestone, which shall clearly identify the grounds for the requested extensions and include information necessary for Buyer to verify the length of and grounds for the extension. If the delay is due to Force Majeure and sixty (60) days' notice is impracticable or impossible, Seller shall provide notice as soon as possible after the occurrence of the Force Majeure event.
- (c) Maximum Delay.
- (i) In no event shall the combined Permitted Extensions under this Section 5.4 for all Milestones combined exceed twelve (12) months in the aggregate.
  - (ii) If on any given day two or more events cause delay to a Milestone at the same time (i.e., occur concurrently), Seller shall only be entitled to one (1) day of delay for such day.
- (d) Daily LD Amount. Seller shall be liable to Buyer for liquidated damages for each day or portion of a day of unexcused delay in a Milestone in an amount equal to the Daily LD Amount. Buyer shall promptly provide invoices to Seller for Daily LDs for the relevant number of unexcused days of delay on a monthly basis. If Buyer does not receive payment of the invoice from Seller within five (5) Business Days of Seller's receipt of the invoice from Buyer, at Buyer's sole discretion, Buyer shall be entitled to collect the Daily LD Amount by one or more of the following:
- (i) drawing upon the Development Assurance, as applicable; and/or
  - (ii) setting off against any amounts owed to Seller by Buyer under this Agreement.
- (e) No Limitation of Damages. The Parties agree that Buyer's receipt of the Daily LD Amount shall (i) not be construed as Buyer's declaration that an Event of Default has occurred under any provision of Article 9, and (ii) not limit Buyer's right to receive a Termination Payment or Damage Payment, as applicable, upon exercise of Buyer's default right pursuant to Section 5.4(h) or Article 9. The Parties further agree that, consistent with Section 9.3(b), the damages Buyer would incur due to Seller's failure to meet the Milestone(s) would be difficult or impossible to predict with certainty and the Daily LD Amount is a reasonable approximation of such damages.
- (f) Refund of Daily LD Amounts. If Seller achieves Commercial Operation by the Commercial Operation Milestone, all Daily LD Amounts paid by Seller shall be refunded to Seller. Seller shall include a request for refund with the first invoice to Buyer.
- (g) Termination of Agreement. Buyer may terminate this Agreement by written notice to Seller if:
- (i) the combined Permitted Extensions for all Milestones exceed twelve (12) months in the aggregate, or
  - (ii) Seller fails to pay, or discontinues paying, any or all of the Daily LD Amount

when due, or

- (iii) Seller continues to timely pay Daily LD Amounts, but unexcused delays and Permitted Extensions exceed twelve (12) months in the aggregate.
- (h) Damage Payment. Upon termination of this Agreement under Section 5.4(g), Buyer shall be entitled to collect the Damage Payment within ten (10) days of Seller's receipt of an invoice from Buyer by one or more of the following:
- (i) drawing upon the Development Assurance;
  - (ii) receiving payments from Seller within ten (10) days of receipt of an invoice from Buyer; and/or
  - (iii) setting off against any amounts owed to Seller by Buyer under this Agreement.
- Buyer shall not be entitled to a Termination Payment in addition to the Damage Payment in the event of a Seller default under Section 5.4(g).
- (i) Additional Extension. Notwithstanding the foregoing, the Parties may mutually agree in writing to an extension of the Commercial Operation Date of up to thirty (30) calendar days beyond the maximum twelve (12) month period for Permitted Extensions with payment of the Daily LD Amount by Seller. Buyer may not terminate this Agreement for failure to achieve the Commercial Operation Date Milestone during the mutually agreed upon extension period so long as Seller continues to pay the Daily LD Amount.

## 5.5 Operation and Maintenance.

- (a) Operation and Maintenance. Seller shall be solely responsible for the ownership, operation, maintenance, and repair of the Facility in accordance with this Agreement, all Applicable Laws, the requirements of the CAISO, NERC and WECC, all applicable contractual obligations and Permits, and in accordance with Good Utility Practice, and shall be solely responsible for all associated costs and expenses. In the event Seller requires any data or information from Buyer in order to comply with any Applicable Law, including the requirements of CAISO, NERC and WECC, relating to the Facility, then Seller shall request in writing such data from Buyer no less than forty-five (45) calendar days prior to Seller's requested date of Buyer's response; provided that if Seller has less than forty-five (45) calendar days prior notice of the need for such data, Seller shall request in writing such data from Buyer as soon as reasonably practicable. Buyer shall make a good faith effort to provide such data and/or information within the timeframe specified in writing by Seller or as soon thereafter as reasonably practicable.
- (b) CAISO and WECC Requirements and Good Utility Practice. Each Party shall perform in compliance with all applicable (i) operating policies, criteria, rules, guidelines, tariffs, and protocols of the CAISO, (ii) WECC scheduling practices, and (iii) Good Utility Practice.
- (c) Start-ups and Shut-downs. Seller shall coordinate all Facility start-ups and shut-downs, in whole or in part, with Buyer in accordance with CAISO scheduling protocols and the reasonable protocols established by Buyer that are not inconsistent with the CAISO Tariff and CAISO procedures.
- (d) CAISO Charges. Seller shall do all things reasonably needed to allow Buyer to comply with any obligations, and minimize any potential liability, under the CAISO Tariff. If and to the extent that Seller fails to comply with the notice provisions in Section 5.6(g) concerning Forced Outages or with its obligations as outlined in the previous sentence, Seller shall be wholly responsible for all imbalances, deviations, or any other CAISO charges or penalties associated with such Forced Outage or related CAISO Tariff obligation.

- (e) Metering. All Energy from the Facility must be delivered through a single CAISO revenue meter dedicated solely to the Facility. Seller shall bear all costs relating to all metering equipment installed to accommodate the Facility. In addition, Seller hereby agrees to provide all meter data to Buyer in a form acceptable to Buyer, and consents to Buyer obtaining from the CAISO all inspection, testing and calibration data and reports. Seller shall grant Buyer the right to retrieve the meter reads from CAISO Operational Meter Analysis and Reporting (OMAR), or its successor MRI-S, via website and direct download, and directly from the CAISO meter(s) at the Facility site.

#### 5.6 Scheduling, Forecasts, and Outages.

- (a) Scheduling. Seller shall provide (or cause to be provided) all Scheduling Coordinator services for the Facility and for delivery of Product to the Delivery Point. Buyer shall provide (or cause to be provided) all Scheduling Coordinator services for Product at and from the Delivery Point.
- (b) CAISO Costs and Revenues. Seller shall be responsible for all CAISO costs (including penalties and other charges) and shall be entitled to all CAISO revenues (including credits and other payments) associated with the Facility and delivery of Product to the Delivery Point; provided, that, any costs or charges assessed by the CAISO which are not due to the Seller's generation, operation or dispatch of the Facility or delivery of Product to the Delivery Point, including costs and charges characterized by the Buyer's CAISO Charge Codes, shall be Buyer's responsibility. In addition, if during the Delivery Term, the CAISO implements or has implemented any sanction or penalty related to scheduling, outage reporting, or generator operation, the cost of the sanctions or penalties shall be the Seller's responsibility.
- (c) Variable or Intermittent Energy Resource Programs. During the Term, Seller may elect to participate in any CAISO program for scheduling variable or intermittent energy resources at its sole cost and discretion to the extent that such participation is consistent with Seller's obligations under this Agreement and the CAISO Tariff.
- (d) Scheduled and Delivered Amounts. [TBD]
- (e) Buyer as SC. Upon ninety (90) days written notice to Seller, Buyer may elect to become the Scheduling Coordinator or designate a qualified third party to provide Scheduling Coordinator services with the CAISO for the delivery and receipt of Product from the Facility at the Delivery Point. Seller shall take all actions and execute and deliver to Buyer and the CAISO all documents necessary to authorize or designate Buyer as Seller's Scheduling Coordinator for the Facility. The Parties shall negotiate in good faith on developing operational and scheduling processes and procedures as necessary for Buyer to perform its responsibilities as SC for the Facility and to effectuate any necessary changes to this Agreement to maintain to the maximum extent possible the benefits and burdens for each Party as they exist as of the Effective Date of this Agreement.
- (f) Generation Forecasts.
- (i) No later than thirty (30) days prior to the end of each Contract Year, Seller will provide a forecast of available capacity and production ("Annual Forecast") detailing hourly expected available generation and monthly capacity and all proposed Planned Outages for the next Contract Year in accordance with Exhibit M. During the Delivery Term of this Agreement, Seller shall not schedule Planned Outages of more than twenty-four (24) hours during the period of reliability accounting (initially the period between June 1<sup>st</sup> and September 30<sup>th</sup> but subject to changes at Buyer's discretion in order to conform to the CAISO's availability assessment).

- (ii) No later than ten (10) days prior to the first day of each month of the Delivery Term, Seller shall provide an electronic update, in a format specified by Buyer, to the Annual Forecast for that calendar month ("Monthly Forecast"). The Monthly Forecast shall include hourly available capacity and expected generation and all Planned Outages.
- (iii) No later than seven (7) days prior to the first day of each week of the Delivery Term, Seller shall provide a weekly forecast of available capacity and production and any changes in Planned Outages ("Weekly Forecast"). The Weekly Forecast shall include hourly available capacity and generation and all Planned Outages.
- (iv) By 5:30 PM Pacific Time on the Business Day immediately preceding the date of delivery, Seller shall provide a forecast of available capacity and production for each hour of the date of delivery ("Day-Ahead Forecast"). The Day-Ahead Forecast shall include hourly available capacity and generation and all Planned Outages.
- (v) In the Annual and Monthly Forecasts, Seller shall provide, at a minimum, the information set forth in Exhibit M. Planned Outages not included in the Annual or Monthly Forecast shall be provided by Seller to Buyer at least ten (10) Business Days prior to the start of the Planned Outage.
- (g) Planned Outages. If Buyer requests a change to the scheduled date of any Planned Outage, Seller shall consider such request in good faith and notify Buyer of its decision within seven (7) calendar days of receipt of Buyer's request.
- (h) Forced Outages. Forced Outages shall be reported by Seller to Buyer verbally as soon as practicable and in writing in accordance with Exhibit M. Seller shall notify Buyer immediately, and in no event later than within ten (10) minutes, whenever the Facility is returned to service.
- (h) Curtailement.
  - (i) Mandatory Curtailement Periods. Seller shall reduce delivery amounts as directed by the CAISO, PTO, or any successor thereof pursuant to a Curtailement Order. Buyer shall not be required to pay Seller for the Product that Seller could have delivered to Buyer but for such Curtailement Order.
  - (ii) Discretionary Curtailement.
    - (A) Buyer may require Seller to curtail deliveries of Product from the Facility for any reason in Buyer's sole discretion (a "Discretionary Curtailement") by delivering a dispatch notice to Seller in accordance with Exhibit M, provided that (1) such Discretionary Curtailements shall be limited to a quantity of not more than ten percent (10%) of the Contract Quantity in each Contract Year. Seller shall reduce the Facility's Product delivery by the amount and for the period set forth in each dispatch notice.
    - (B) In addition to paying Seller for all Delivered Energy hereunder, Buyer shall pay Seller the Contract Price for the amount of Product that Seller could reasonably have delivered to Buyer but for such Discretionary Curtailement ("Buyer Curtailed Product").
  - (iii) Failure to Comply. If Seller fails to comply with a dispatch notice that meets the requirements for a Discretionary Curtailement, for the amount of Product (measured in MWhs of Product) that the Facility delivered in contradiction to the dispatch notice, Seller shall pay Buyer the greater of:



- (A) Two hundred percent (200%) of the Contract Price for such MWs plus any penalties or other charges actually incurred resulting from Seller's failure to comply with the dispatch notice; and
  - (B) the CAISO's Real-Time Market price for the applicable PNode for such MWs plus any penalties or other charges actually incurred resulting from Seller's failure to comply with the dispatch notice.
  - (C) The Parties agree that, consistent with Section 9.3(b), the damages Buyer would incur due to Seller's failure to comply with a Discretionary Curtailment would be difficult or impossible to predict with certainty and the liquidated damages set forth in this Section are a reasonable approximation of such damages.
- (iv) At Buyer's sole discretion, Buyer shall be entitled to collect the damages set forth in Section 5.6(h)(iii) If Seller does not provide payment to Buyer within ten (10) days of Seller's receipt of an invoice from Buyer for the damages set forth in Section 5.6(h)(iii), at Buyer's sole discretion, Buyer shall be entitled to collect damages by one or more of the following:
- (A) drawing upon the Performance Assurance; and/or
  - (B) receiving payments from Seller; and/or
  - (C) setting off against any amounts owed to Seller by Buyer under this Agreement.

## ARTICLE 6: DEVELOPMENT AND PERFORMANCE ASSURANCE

**6.1 Grant of Security Interest/Remedies.** To secure its obligations under this Agreement hereunder, Seller hereby grants to Buyer, as the secured party, a first priority security interest in, and lien on (and right of setoff against), and assignment of, all such Development Assurance and Performance Assurance posted with Buyer in the form of cash collateral or cash equivalent collateral and any and all proceeds resulting therefrom or the liquidation thereof, whether now or hereafter held by, on behalf of, or for the benefit of, Buyer. Within thirty (30) calendar days of the delivery of the Development Assurance or Performance Assurance, as applicable, Seller agrees to take such action as Buyer reasonably requires in order to perfect a first-priority security interest in, and lien on (and right of setoff against), such Development Assurance or Performance Assurance and any and all proceeds resulting therefrom or from the liquidation thereof, respectively.

Upon or any time after the occurrence or deemed occurrence and during the continuation of an Event of Default or an Early Termination Date, Buyer, as the Non-Defaulting Party, may do any one or more of the following:

- (a) exercise any of the rights and remedies of a secured party with respect to all Development Assurance or Performance Assurance, as applicable, including any such rights and remedies under the law then in effect;
- (b) draw on any outstanding Letter of Credit or Guaranty issued for its benefit and retain any cash held by Buyer as Development Assurance or Performance Assurance; and
- (c) liquidate all Development Assurance or Performance Assurance, as applicable, then held by or for the benefit of Buyer free from any claim or right of any nature whatsoever of Seller, including any equity or right of purchase or redemption by Seller.

Buyer shall apply the proceeds of the collateral realized upon the exercise of any such rights or remedies to reduce Seller's obligations under the Agreement (Seller remaining liable for any amounts owing to Buyer after such application), subject to the Buyer's obligation to return any surplus proceeds remaining after such obligations are satisfied in full.

## 6.2 Development Assurance and Performance Assurance.

- (a) Provision of Security by Seller. Seller agrees to deliver to Buyer collateral to secure its obligations under this Agreement which Seller shall maintain in full force and effect for the period posted with Buyer, as follows:
- (i) Development Assurance. Development Assurance pursuant to this Section 6.2(a)(i) in the amount of sixty dollars (\$60) per kW AC multiplied by the Expected Initial Capacity and in the form of cash, a Letter of Credit, or Guaranty within ten (10) calendar days following the Execution Date until Seller posts the Performance Assurance pursuant to Section 6.2(a)(ii) below with Buyer as applicable;
  - (ii) Performance Assurance. Performance Assurance pursuant to this Section 6.2(a)(ii) in the amount of five percent (5%) of the total revenue under this Agreement in the form of cash, a Letter of Credit, or a Guaranty from the Commercial Operation Date and ending at the expiration of the Delivery Term; provided that, with Buyer's consent, Seller may elect to apply a portion of the Development Assurance toward the Performance Assurance. The amount of the Performance Assurance shall adjust (annually/bi-annually) to reflect the remaining value of the Agreement.
- (b) No Limitation of Damages. The amount of Development Assurance and Performance Assurance required under this Agreement shall not be deemed a limitation of damages.
- (c) Use of Development Assurance. Buyer shall be entitled to draw upon the Development Assurance posted by Seller for any reason permitted under this Agreement until the Development Assurance is exhausted. Buyer shall also be entitled to draw upon the Development Assurance for any Damage Payment arising upon Buyer's declaration of an Early Termination Date prior to the Commercial Operation Date.
- (d) Termination of Development Assurance. Buyer shall return the Development Assurance to Seller less any amounts drawn in accordance with this Agreement, within thirty (30) calendar days after the occurrence of the following: (i) Buyer terminates this Agreement pursuant to Section 2.1(c) or 2.2(c), or (ii) Seller posts Performance Assurance with Buyer. The Development Assurance (or portion thereof) shall be returned unless, with Buyer's consent, Seller elects to apply the Development Assurance (or a portion thereof) toward the Performance Assurance.
- (e) Use of Performance Assurance. Buyer shall be entitled to draw upon the Performance Assurance posted by Seller for any reason permitted under this Agreement, including Buyer's declaration of an Early Termination Date after the Commercial Operation Date.
- (f) Return of Performance Assurance. Buyer shall return the unused portion of Performance Assurance to Seller within thirty (30) days after the following has occurred: (i) the Agreement Term of the Agreement has ended, or an Early Termination Date has occurred; and (ii) all payment obligations of the Seller arising under this Agreement, including payments pursuant to a Damage Payment, Termination Payment, indemnification payments, or other damages are paid in full (whether directly or indirectly such as through set-off or netting).

**6.3 Letter of Credit.** Development Assurance or Performance Assurance provided in the form of a Letter of Credit shall be substantially in the form set forth in Exhibit K-1 subject to the following provisions:

- (a) Renewal of Letter of Credit. If Seller has provided a Letter of Credit pursuant to any of the applicable provisions in this Article 6, then Seller shall renew or cause the renewal of each outstanding Letter of Credit on a timely basis in accordance with this Agreement.

- (b) Failure of Letter of Credit and Cure. In the event the issuer of such Letter of Credit at any time: fails to maintain the requirements of an Eligible LC Bank or Letter of Credit, becomes Bankrupt, indicates its intent not to renew such Letter of Credit, or fails to honor Buyer's properly documented request to draw on such Letter of Credit, Seller shall cure such occurrence by complying with either (i) or (ii) below in an amount equal to the outstanding Letter of Credit, and by completing the action within ten (10) Business Days after the date of Buyer's notice to Seller of an occurrence listed in this subsection (Seller's compliance with either (i) or (ii) below is considered the "Cure"):
- (i) providing a substitute Letter of Credit that is issued by an Eligible LC Bank other than the bank which is the subject of Buyer's notice to Seller in this section 6.3(b),
  - (ii) providing a Guaranty, or
  - (iii) posting cash.
- (c) Failure to Cure. If Seller fails to cure or if such Letter of Credit expires or terminates without a full draw thereon by Buyer, or fails or ceases to be in full force and effect at any time that such Letter of Credit is required pursuant to the terms of this Agreement, then Seller shall have failed to meet the collateral requirements of Section 6.2 and Buyer may declare an Event of Default as set forth in Article 9.
- (d) Letter of Credit Costs. In all cases, the reasonable costs and expenses of establishing, renewing, substituting, canceling, increasing, reducing, or otherwise administering the Letter of Credit shall be borne by Seller.

**6.4 Guaranty.** If at any time Seller's Guarantor or Guaranty is no longer acceptable to Buyer, in its reasonable discretion, Seller shall replace the Guaranty within five (5) Business Days following Buyer's written request for replacement of the Guaranty. Seller shall provide for the benefit of Buyer either (1) cash, (2) a replacement Guaranty from a different Guarantor meeting the criteria set forth in the definition of Guarantor, or (3) a replacement Letter of Credit from an issuer meeting the criteria set forth in the definition of Letter of Credit. If Seller fails to provide replacement Development or Performance Assurance as required in this Section 6.4, then Buyer may declare an Event of Default as set forth in Article 9.

## ARTICLE 7: FINANCIAL STATEMENTS

**7.1 Seller's Obligations.** If requested by Buyer, Seller shall deliver to Buyer (i) within six (6) months following the end of each fiscal year, a copy of Seller's and Seller's Parent's annual report containing audited consolidated financial statements for such fiscal year (or if not available, unaudited consolidated financial statements for such fiscal year), and (ii) within forty-five (45) calendar days after the end of each of its first three (3) fiscal quarters of each fiscal year, a copy of Seller's and Seller's Parent's quarterly report containing unaudited consolidated financial statements for such fiscal quarter. In all cases, the statements shall be for the most recent accounting period and shall be prepared in accordance with GAAP and shall be certified by the Chief Financial Officer or equivalent officer of Seller on behalf of Seller and of Seller's Parent on behalf of Seller's Parent; provided, however, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not constitute an Event of Default so long as Seller diligently pursues the preparation, certification and delivery of the statements;

**7.2 Buyer's Obligations.** If requested by Seller, Buyer shall deliver to Seller (i) within six (6) months following the end of each fiscal year, a copy of Buyer's annual report containing audited consolidated financial statements for such fiscal year (or if not available, unaudited consolidated financial statements for such fiscal year), and (ii) within forty-five (45) calendar days after the end of each of its first three (3) fiscal quarters of each fiscal year, a copy of Buyer's quarterly report containing

unaudited consolidated financial statements for such fiscal quarter. In all cases, the statements shall be for the most recent accounting period and shall be prepared in accordance with GAAP, provided, however, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not constitute an Event of Default so long as Buyer diligently pursues the preparation, certification and delivery of the statements.

## ARTICLE 8: FORCE MAJEURE

**8.1 Remedial Action.** Subject to the limitation on extensions of Milestones set forth in Sections 5.4(a) and (c), a Party shall not be liable to the other Party if the Party is prevented from performing its obligations hereunder due to a Force Majeure Event. The Party rendered unable to fulfill an obligation by reason of a Force Majeure Event shall take all action necessary to remove such inability with all due speed and diligence. The non-performing Party shall be prompt and diligent in attempting to mitigate the effects of and to remove the cause of its failure to perform, and nothing herein shall be construed as permitting that Party to continue to fail to perform after said cause has been removed. Notwithstanding the foregoing, the existence of a Force Majeure Event shall not excuse any Party from its obligations to make payment of amounts due hereunder.

**8.2 Notice.** In the event of any delay or nonperformance resulting from a Force Majeure Event, the Party suffering the Force Majeure Event shall, as soon as practicable under the circumstances, notify the other Party, in writing, of the nature, cause, date of commencement, and the anticipated extent of any delay or interruption in performance.

**8.3 Termination Due To Force Majeure Event.** Subject to the provisions of Section 5.4(a) and (c) on extensions of Milestones, if a Party is prevented in any material respect from performing any material obligations under this Agreement solely due to a Force Majeure Event lasting for a period of twelve (12) consecutive months or longer, the unaffected Party may terminate this Agreement, without liability of either Party to the other, upon thirty (30) calendar days' prior written notice at any time following expiration of such period of twelve (12) consecutive months. In such event, Buyer shall promptly return to Seller all Development Assurance or Performance Assurance, as applicable, less any LD amount paid by or due and payable by Seller prior to the date of such termination for reasons unrelated to this Section 8.3. This Section 8.3 shall not affect the rights and remedies associated with any other termination rights set forth in this Agreement.

## ARTICLE 9: DEFAULT, REMEDIES, AND TERMINATION

### 9.1 Events of Default.

- (a) The occurrence of any of the following shall constitute an Event of Default by a Party:
- (i) the breach of any material obligation or covenant of this Agreement and such Party fails to cure such breach within thirty (30) calendar days after written notification of default by the other Party; however, the Parties may mutually agree upon a longer period for cure if the Event of Default cannot reasonably be cured within thirty (30) calendar days;
  - (ii) subject to Section 4.1(c), failure to make any payment when due under this Agreement within ten (10) Business Days after written notice that such payment is due;
  - (iii) Any representation or warranty made by such Party herein is false or misleading in any material respect when made or when deemed made or repeated, and is not cured or remedied within thirty (30) days after written notice;

- (iv) such Party becomes Bankrupt;
  - (v) subject to Section 12.1(c), such Party consolidates or amalgamates with, or merges with or into, or transfers all or substantially all of its assets to, another entity and, at the time of such consolidation, amalgamation, merger or transfer, the resulting, surviving or transferee entity fails to assume all the obligations of such Party under this Agreement to which it or its predecessor was a party by operation of law or pursuant to an agreement reasonably satisfactory to the other Party.
- (b) The following shall constitute additional Events of Default by Seller:
- (i) Subject to Section 2.3(b)(iii), Seller fails, for any reason other than an unauthorized act or omission by Buyer, to achieve the Delivery Start Date;
  - (ii) Subject to Section 5.4(a), the occurrence of any of the events set forth in Section 5.4(g);
  - (iii) Notwithstanding any other provision of this Agreement, Seller fails for a consecutive twelve (12) month period to deliver at least fifty percent (50%) of the expected monthly quantities as set forth in the Annual Forecast excluding Seller Excused Hours;
  - (iv) Seller fails to satisfy any of the credit requirements of Article 6 of this Agreement.

## 9.2 Termination for Default.

- (a) Declaration of Early Termination Date. If an Event of Default with respect to a defaulting Party has occurred, is continuing and has not been cured, the other Party (the "Non-Defaulting Party") shall have the right to:
- (i) send notice, designating a day, no earlier than ten (10) calendar days after the day such notice is deemed to be received, as an Early Termination Date for this Agreement;
  - (ii) accelerate all amounts owing between the Parties, terminate this Agreement and end the Delivery Term effective as of the Early Termination Date;
  - (iii) collect as of the Early Termination Date, (A) the Damage Payment in the case of a Seller Event of Default arising at any time prior to the Commercial Operation Date, including an Event of Default pursuant to Section 9.1, or (B) the Termination Payment (which shall be calculated in accordance with Section 9.2(b)) if any Event of Default by either Party arose after the Commercial Operation Date;
  - (iv) withhold any payments due to the Defaulting Party under this Agreement;
  - (v) suspend performance;
  - (vi) exercise its rights pursuant to Article 6 of this Agreement to draw upon and retain Development Assurance or Performance Assurance, as applicable; and
  - (vii) exercise any other right or remedy available at law or in equity to the extent otherwise permitted under this Agreement.
- (b) Calculation of Termination Payment.
- (i) The Non-Defaulting Party shall calculate, in a commercially reasonable manner, a Termination Payment as of the Early Termination Date. Third parties supplying information for purposes of the calculation of Gains or Losses may include dealers in the relevant markets, end-users of relevant Product, information vendors and other sources of market information. The quotes obtained shall be: for a like amount of a like Product; at the same (or a

reasonably equivalent) PNode, and; for the remainder of the Delivery Term, or in any other commercially reasonable manner.

- (ii) If the Non-Defaulting Party's aggregate Gains exceed its aggregate Losses and Costs, if any, resulting from such termination of this Agreement, the amount of the Termination Payment shall be zero.
  - (iii) The Non-Defaulting Party shall not have to enter into replacement transactions to establish a Termination Payment.
  - (iv) The Termination Payment shall be the sole and exclusive remedy available to the Non-Defaulting Party in connection with its termination of this Agreement if any Event of Default arose after the Commercial Operation Date, and shall not include consequential, incidental, punitive, exemplary, indirect, or business interruption damages.
  - (v) Section 4.3 of this Agreement is not a limitation on Buyer's liability for a Termination Payment.
- (c) Notice of Termination Payment. As soon as practicable after declaration of an Early Termination Date, the Non-Defaulting Party shall give notice to the Defaulting Party of the amount of the Termination Payment due from the Defaulting Party to the Non-Defaulting Party, if any. The notice shall include a written statement explaining in reasonable detail the calculation of such amount and the sources for such calculation. The Termination Payment shall be made to the Non-Defaulting Party fifteen (15) Business Days after such termination payment notice is effective.
- (d) Disputes Regarding Termination Payment. If the Defaulting Party disputes the Non-Defaulting Party's calculation of the Termination Payment, in whole or in part, the Defaulting Party shall, within fifteen (15) Business Days of receipt of the Non-Defaulting Party's calculation of the Termination Payment, provide to the Non-Defaulting Party a detailed written explanation of the basis for such dispute. Following delivery of such a notice, disputes regarding the Termination Payment shall be resolved in accordance with Section 10.8.
- (e) Liquidated Damages. The Parties agree that the Damage Payment to be paid by Seller shall be considered liquidated damages and not a penalty, in accordance with Section 9.3(d) and subject to Section 9.3(b).

### 9.3 Limitation of Liability/Liquidated Damages.

- (a) **THERE IS NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ANY AND ALL IMPLIED WARRANTIES ARE DISCLAIMED.**
- (b) **THE PARTIES CONFIRM THAT THE EXPRESS REMEDIES AND MEASURES OF DAMAGES PROVIDED IN THIS AGREEMENT SATISFY THE ESSENTIAL PURPOSES HEREOF. FOR BREACH OF ANY PROVISION FOR WHICH AN EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED, SUCH EXPRESS REMEDY OR MEASURE OF DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY, THE OBLIGOR'S LIABILITY SHALL BE LIMITED AS SET FORTH IN SUCH PROVISION AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED, UNLESS THE PROVISION PROVIDES THAT THE EXPRESS REMEDIES ARE IN ADDITION TO OTHER REMEDIES THAT MAY BE AVAILABLE. IF NO REMEDY OR MEASURE OF DAMAGES IS EXPRESSLY PROVIDED HEREIN, THE OBLIGOR'S LIABILITY SHALL BE LIMITED TO DIRECT ACTUAL DAMAGES ONLY, SUCH DIRECT ACTUAL DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY AND ALL SUCH OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED UNLESS EXPRESSLY HEREIN PROVIDED. NEITHER PARTY**

SHALL BE LIABLE TO THE OTHER PARTY UNDER THIS AGREEMENT FOR ANY INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR CONSEQUENTIAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOSS OF USE, LOSS OF REVENUES, LOSS OF PROFIT, OR OTHER BUSINESS INTERRUPTION DAMAGES, INTEREST CHARGES, OR COST OF CAPITAL, BY STATUTE, IN TORT OR CONTRACT, UNDER ANY INDEMNITY PROVISION OR OTHERWISE; PROVIDED HOWEVER, NOTHING IN THIS SECTION SHALL AFFECT THE ENFORCEABILITY OF THE PROVISIONS OF THIS AGREEMENT RELATING TO EXPRESS REMEDIES OR MEASURE OF DAMAGES. THE PARTIES ACKNOWLEDGE AND AGREE THAT THE LIQUIDATED DAMAGES AND DAMAGE PAYMENTS SET FORTH IN SECTIONS 3.4(c), 5.4(d), 5.4(h), 5.6(h)(iii), AND 9.2(a)(iii) ARE EACH REASONABLE AND REPRESENT A FAIR AND GENUINE ESTIMATE OF THE DAMAGES THAT WOULD OCCUR RELATED TO THE EVENTS DESCRIBED THEREIN. THE PARTIES ACKNOWLEDGE AND AGREE THAT THE DAMAGES FOR THE CIRCUMSTANCES SET FORTH ABOVE WOULD BE IMPOSSIBLE OR DIFFICULT TO MEASURE, OR OTHERWISE OBTAINING AN ADEQUATE REMEDY IS IMPRACTICABLE. THE PARTIES FURTHER AGREE THAT PAYMENT OF SUCH AMOUNTS SHALL BE AS AND FOR LIQUIDATED DAMAGES AND NOT AS A PENALTY AND ARE THEREFORE NOT SUBJECT TO AVOIDANCE UNDER CALIFORNIA CIVIL CODE SECTION 1671.

- (c) BUYER'S PAYMENT OBLIGATIONS UNDER THIS AGREEMENT SHALL BE LIMITED TO THE PAYMENT OF THE COMPENSATION PROVIDED UNDER THIS AGREEMENT, INCLUDING, BUT NOT LIMITED TO, THE COMPENSATION PROVIDED FOR IN ARTICLES 3 AND 4, AND SECTION 9.2.
- (d) EXCEPT AS OTHERWISE PROVIDED HEREIN, THE RIGHTS AND REMEDIES OF A PARTY PURSUANT TO THIS ARTICLE 9 SHALL BE CUMULATIVE AND IN ADDITION TO THE RIGHTS OF THE PARTIES OTHERWISE PROVIDED IN THIS AGREEMENT.

## ARTICLE 10: INDEMNIFICATION

### 10.1 Indemnification.

- (a) Seller Indemnification Prior to Commercial Operation Date. Up to and including the Commercial Operation Date, Seller shall indemnify, defend, and hold harmless Buyer, and its officials, directors, agents and employees ("Indemnified Party"), from any claim, liability, loss, injury or damage arising out of, or in connection with, the negligence, willful misconduct or violation of Applicable Law by Seller and/or its agents, employees or sub-contractors, excepting only loss, injury or damage caused by the active negligence, willful misconduct or violation of Applicable Law by Buyer.
- (b) Seller and Buyer Indemnification after Commercial Operation Date. After the Commercial Operation Date, each Party ("Indemnifying Party") shall defend, indemnify and hold harmless the other Party and its elected officials, officers, directors, employees, agents, affiliates and representatives (each, an "Indemnified Party") from and against any and all losses, including but not limited to losses arising from personal injury or death, or damage to property, but only to the extent such losses result from or arise out of the negligence, willful misconduct or violation of Applicable Law by the Indemnifying Party.
- (c) Notice. If an Indemnified Party determines that it is entitled to defense and indemnification under this Section 10.1, such Indemnified Party shall promptly notify

the Indemnifying Party in writing of the losses, and provide all reasonably necessary or useful information, and authority to settle and/or defend the losses. No settlement that would impose costs or expense upon the Indemnified Party shall be made without such Party's prior written consent.

**10.2 Debt Liability Disclaimer.** Buyer shall not be liable for and shall be held harmless and indemnified by Seller for (a) any claims or damages arising out of any other contract to which Seller is a party, and (b) subject to Section 10.1(b), any tortious action or inaction, negligent error in judgment, act of negligence, intentional tort, negligent mistakes or other acts taken or not taken by the Seller, its employees, agents, servants, invitees, guests or anyone acting in concert with or on behalf of the Seller.

## ARTICLE 11: REPRESENTATIONS AND WARRANTIES

**11.1 Seller's Representations and Warranties.** In addition to the representations and warranties set forth in other sections of this Agreement, Seller represents and warrants to Buyer that as of the Execution Date:

- (a) Seller is duly organized and validly existing as a \_\_\_\_\_ under the laws of \_\_\_\_\_, and has the lawful power to engage in the business it presently conducts and contemplates conducting in this Agreement, and Seller is duly qualified in California and each jurisdiction wherein the nature of the business transacted by it makes such qualification necessary;
- (b) Seller has the legal power and authority to make and carry out this Agreement and to perform all of its obligations hereunder and all such actions have been duly authorized by all necessary proceedings on its part;
- (d) The execution, delivery and performance of this Agreement by Seller shall not conflict with its governing documents, any Applicable Laws, or any covenant, agreement, understanding, decree or order to which Seller is a party or by which it is bound or affected;
- (e) This Agreement has been duly and validly executed and delivered by Seller and, as of the Execution Date, constitutes a legal, valid and binding obligation of Seller, enforceable in accordance with its terms against Seller, except to the extent that its enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the rights of creditors generally or by general principles of equity;
- (f) There are no actions, suits, proceedings or investigations pending or, to the knowledge of Seller, threatened, in writing, against Seller or any of its affiliates, at law or in equity, before any Governmental Authority, which individually or in the aggregate are reasonably likely to have a materially adverse effect on the business, properties or assets or the condition, financial or otherwise, of Seller, or to result in any impairment of Seller's ability to perform its obligations under this Agreement;
- (g) It is not Bankrupt and there are no proceedings pending or being contemplated by it or any of its affiliates, or, to its knowledge, threatened against it or its affiliates which would result in it being or becoming Bankrupt; and
- (h) It is a forward contract merchant within the meaning of the U.S. Bankruptcy Code (as in effect as of the Execution Date of this Agreement).

**11.2 Buyer Representations and Warranties.** Buyer represents and warrants to Seller that as of the Execution Date:



- (a) Buyer is a municipal corporation, duly organized and validly existing, and has the lawful power to engage in the business it presently conducts and contemplates conducting in this Agreement;
- (b) Buyer has the legal power and authority to make and carry out this Agreement and to perform its obligations hereunder and all such actions have been duly authorized by all necessary proceedings on its part;
- (c) The execution, delivery and performance of this Agreement by Buyer shall not conflict with its governing documents, any Applicable Laws or any covenant, agreement, understanding, decree or order to which Buyer is a party or by which it is bound or affected;
- (d) This Agreement has been duly and validly executed and delivered by Buyer and, as of the Execution Date, constitutes a legal, valid and binding obligation of Buyer, enforceable in accordance with its terms against Buyer, except to the extent that its enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the rights of creditors generally or by general principles of equity;
- (e) There are no actions, suits, proceedings or investigations pending or, to the knowledge of Buyer, threatened, in writing, against Buyer, at law or in equity, before any Governmental Authority, which individually or in the aggregate are reasonably likely to have a materially adverse effect on the business, properties or assets or the condition, financial or otherwise, of Buyer, or to result in any impairment of Buyer's ability to perform its obligations under this Agreement;
- (f) It is not Bankrupt and there are no proceedings pending or being contemplated by it or, to its knowledge, threatened against it which would result in it being or becoming Bankrupt; and
- (g) It is a forward contract merchant within the meaning of the U.S. Bankruptcy Code (as in effect as of the Execution Date of this Agreement).

### 11.3 Covenants.

- (a) General Covenants. In addition to other covenants in this Agreement, each Party covenants that throughout the Delivery Term:
  - (i) it shall continue to be duly organized, validly existing and in good standing under the Laws of the jurisdiction of its formation;
  - (ii) it shall maintain (or obtain from time to time as required, including through renewal, as applicable) all regulatory authorizations necessary for it to legally perform its obligations under this Agreement; and
  - (iii) it shall perform its obligations under this Agreement in a manner that does not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any Applicable Law.
- (b) Seller Covenant. Seller covenants that, throughout the Delivery Term:
  - (i) it shall maintain CEC Certification of the Facility; and
  - (ii) it shall ensure that the Renewable Energy Credits transferred to Buyer conform to the definition and attributes required for compliance with the California Renewables Portfolio Standard and as may be modified by subsequent decision of the CPUC or by subsequent legislation.

## ARTICLE 12: MISCELLANEOUS

### 12.1 Assignment

- (a) General Assignment. Except as provided in Sections 12.2(b) and (c), neither Party shall assign this Agreement or its rights hereunder without the prior written consent of the other Party, which consent shall not be unreasonably withheld, conditioned or delayed so long as among other things, (i) the assignee assumes the transferring Party's payment and performance obligations under this Agreement, (ii) the assignee agrees in writing to be bound by the terms and conditions hereof, (iii) the transferring Party delivers financial statements, information and other evidence satisfactory to the non-transferring Party of the proposed assignee's technical and financial capability to fulfill the assigning Party's obligations hereunder, and (iv) the transferring Party delivers such tax and enforceability assurance as the other Party may reasonably request.
- (b) Assignment to Financing Providers. Notwithstanding any provision to the contrary in this Section 12.1, Buyer hereby consents to assignment of this Agreement by Seller as collateral for any financing or refinancing of the Facility to a Lender. Seller's obligations under this Agreement shall continue in their entirety in full force and effect. Promptly after granting such interest, Seller shall notify Buyer in writing of the name, address, and telephone and facsimile numbers of any Lender to which the Seller's interest under this Agreement has been assigned. The notice shall include the names of the Lender's primary contact(s) to whom all communications may be addressed. Seller shall promptly notify Buyer of any changes to the information contained in the notice. As a condition to Buyer's consent to assignment, the following provisions shall apply to any assignment under this Section 12.1(b):
- (i) Lender shall have the right, but not the obligation, to perform any act required to be performed by Seller under this Agreement to prevent or cure a default by the Seller and such act performed by Lender shall be as effective to prevent or cure a default as if done by Seller.
  - (ii) Buyer shall cooperate with Seller or a Lender to execute or arrange for the delivery of certificates, consents, opinions, estoppels, amendments and other documents reasonably requested by Seller or Lender in order to complete any financing or refinancing and shall enter into reasonable agreements with such Lender that provide for recognition of the Lender's security interest by Buyer and such other provisions as may be reasonably requested by Seller or any such Lender; provided, however, that all costs and expenses (including reasonable attorney's fees) incurred by Buyer in connection with an assignment of this Agreement to a Lender shall be borne by Seller.
  - (iii) In the event of a Default under this Agreement, Buyer shall provide a copy of the notice of Default to the Lender pursuant to Section 9.2(a) at the same time as the notice is provided to Seller. Buyer shall accept a cure performed by a Lender and shall negotiate in good faith with the Lender as to the cure period(s) allowed for the Lender to cure any Event of Default. Buyer shall accept a cure by Lender so long as the cure is accomplished within the applicable cure period. Notwithstanding any Lender cure, Seller shall not be released and discharged from, and shall remain liable for, any and all obligations to the Buyer arising or accruing hereunder.
  - (iv) If Lender, directly or indirectly, takes possession of, or title to the Facility (including possession by a receiver or title by foreclosure or deed in lieu of foreclosure), Lender must (i) assume all of Seller's obligations arising under

this Agreement, and (ii) shall cure all defaults under this Agreement existing as of the date of change of title or control as required under this Agreement.

- (c) Assignment in Connection with a Change in Control. Notwithstanding any provision to the contrary in this Section 12.1, any direct or indirect change of control of Seller (whether voluntary or by operation of Law) shall not require the prior written consent of Buyer. Seller shall promptly notify Buyer of any direct or indirect change in control and shall provide any information reasonably requested by Buyer regarding the change in control. Seller acknowledges that its obligations under this Agreement remain in full force and effect notwithstanding such change in control and that Seller is solely responsible for all ensuring that required changes to its vendor certifications are promptly implemented. Unauthorized Assignment. Any assignment or purported assignment in violation of this Section 12.1 is void.

## 12.2 Proprietary or Confidential Information.

- (a) Buyer Confidential Information. Seller understands and agrees that, in the performance of this Agreement or in contemplation thereof, Seller may have access to private or confidential information which may be owned or controlled by Buyer and that such information may contain proprietary or confidential details, the disclosure of which to third parties may be damaging to Buyer. Seller agrees that all private and confidential information disclosed by Buyer to Seller shall be held in confidence and used only in performance of the Agreement. Seller shall exercise the same standard of care to protect such information as a reasonably prudent person would use to protect its own proprietary data.
- (b) Public Records Act and Sunshine Ordinance. Seller acknowledges that Buyer is a public agency subject to the disclosure requirements of the Public Records Laws. If documents or information submitted to Buyer contain Seller's proprietary and confidential information and Seller claims that such information falls within one or more Public Records Laws exemptions, Seller must clearly mark such information "CONFIDENTIAL AND PROPRIETARY", and identify the specific lines containing such information (the "Confidential Information"). Buyer shall disclose such Confidential Information to third parties only to the extent required by California law (including, without limitation, the California Constitution, the Public Records Laws, and other Applicable Law.
- (c) Disclosure of Confidential Information by Buyer. In the event of a third party request for Buyer to disclose such Confidential Information, Buyer shall make reasonable efforts to provide notice to Seller prior to disclosure. If Seller contends that any Confidential Information is exempt from the Public Records Laws and wishes to prevent disclosure, Seller shall obtain a protective order, injunctive relief or other appropriate remedy from a court of law in San Francisco County before Buyer's deadline for responding to the disclosure request. If Seller fails to obtain such remedy prior to Buyer's deadline for responding to the request, Seller agrees that Buyer may disclose the requested Confidential Information. Seller further agrees that Buyer shall have no liability to Seller arising out of any disclosure by Buyer of any Seller Confidential Information before Seller has timely obtained an order, injunctive relief or other appropriate remedy to prevent Buyer from making the requested third party disclosure.
- (d) Non-Confidential Information. Notwithstanding anything to the contrary in this Section 12.2 nothing shall restrict any Party from using or disclosing information related to this Agreement, including Confidential Information if such information (i) is generally available to the public; (ii) was within the using or disclosing Party's possession prior to it being furnished hereunder, provided that such information is not

subject to another confidentiality agreement with, or other contractual, legal or fiduciary obligation of confidentiality to, any other party with respect to such information; (iii) is rightfully obtained by a Party from third parties authorized to make such disclosure without restriction; (iv) is legally required to be disclosed by judicial or other governmental action as determined by such Party's attorney acting in good faith; or (v) is disclosed without a duty of confidentiality to a third party by, or with the authorization of, the disclosing Party; or (vi) is furnished to the non-disclosing Party's Affiliates, and to each of such person's auditors, attorneys, advisors or lenders which are required to keep the information that is disclosed in confidence.

- (e) Nondisclosure of Private Information. If this Agreement requires Buyer to disclose "Private Information" to Seller within the meaning of San Francisco Administrative Code Chapter 12M, Seller shall use such information only in accordance with the restrictions stated in Chapter 12M and in this Agreement and only as necessary in performing this Agreement. Seller is subject to the enforcement and penalty provisions in Chapter 12M.

### **12.3 Dispute Resolution/Choice of Law.**

- (a) Negotiation; Dispute Resolution. The Parties will attempt in good faith to resolve any dispute or controversy arising out of or relating to the performance of this Agreement by negotiation. The status of any dispute or controversy notwithstanding, each Party shall proceed diligently with the performance of its obligations under this Agreement in accordance with and subject to the terms of this Agreement. If agreed by both Parties in writing, disputes may be resolved by a mutually agreed-upon alternative dispute resolution process. Neither Party will be entitled to legal fees or costs for matters resolved under this section.
- (b) Choice of Law and Venue. This Agreement and the rights and duties of the Parties hereunder shall be construed, enforced and performed in accordance with the laws of the state of California, and/or the laws of the United States, as applicable, without regard to principles of conflicts of law which may direct the application of the laws of another jurisdiction. Venue shall be in the County of San Francisco, State of California.

**12.4 Audit.** Each Party has the right, at its sole expense and during normal working hours, to examine the records of the other Party to the extent reasonably necessary to verify the accuracy of any statement, charge or computation made pursuant to this Agreement. The Parties shall maintain such data and records in an accessible location and condition for a period of not fewer than five (5) years after final payment under this Agreement or until after final audit has been resolved, whichever is later.

### **12.5 General.**

- (a) Entire Agreement. This Agreement the exhibits, attachments, and any written and fully executed supplements hereto, any designated collateral, credit support, or similar arrangement between the Parties constitute the entire agreement between the Parties relating to the subject matter.
- (b) Construction. This Agreement shall be considered for all purposes as prepared through the joint efforts of the Parties and shall not be construed against one Party or the other as a result of the preparation, substitution, submission or other event of negotiation, drafting or execution hereof.
- (c) Amendments. Except to the extent herein provided for, no amendment or modification to this Agreement shall be enforceable unless reduced to writing and executed by both Parties.

- (d) No Third Party Beneficiaries. This Agreement shall not impart any rights enforceable by any third party (other than a permitted successor or assignee bound to this Agreement).
- (e) No Waiver. Waiver by a Party of any default by the other Party shall not be construed as a waiver of any other default.
- (f) Change in Law. If any provision of this Agreement is rendered unlawful by action by any Governmental Authority, or any change in Applicable Law (a "Change in Law") occurring after the Execution Date, the remaining lawful obligations that arise under this Agreement shall not be affected. If the Change in Law results in material changes to the Parties' obligations with regard to any Product sold hereunder and that has the effect of changing the transfer and sale procedure set forth in this Agreement so that the implementation of this Agreement becomes impossible or impracticable, or otherwise modifies the RPS or language required to conform to the RPS, the Parties shall work in good faith to revise this Agreement in a manner that maintains to the greatest extent practicable the original intent of the Parties under this Agreement so that the Parties may perform their obligations regarding the purchase and sale of Product. If the Parties cannot reach a good faith agreement on amendments, the Agreement shall be terminated by mutual agreement without liability for either Party.
- (g) Headings. The headings used herein are for convenience and reference purposes only.
- (h) Assigns. This Agreement shall be binding on each Party's successors and permitted assigns.
- (i) No Dedication. No undertaking by one Party to the other under any provision of the Agreement shall constitute the dedication of that Party's system or any portion thereof to the other Party or to the public or affect Seller as an independent entity and not a public utility.
- (j) Relationship of the Parties. The duties, obligations and liabilities of the Parties are independent of one another and shall be limited to those expressly set forth herein. The Agreement shall not be interpreted or construed to create an association, joint venture, fiduciary relationship or partnership between Seller and Buyer or to impose any partnership obligation or liability or any trust or agency obligation or relationship upon either Party. Seller and Buyer shall not have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or act as or be an agent or representative of or otherwise bind the other Party. Seller and Buyer intend to act as energy supplier and energy purchaser, respectively, and do not intend to act as, or to be treated as, partners in, co-venturers in, or lessor/lessee with respect to the Facility or any business related to the Facility.
- (k) Compliance with Americans with Disabilities Act. Seller acknowledges that, pursuant to the Americans with Disabilities Act (ADA), programs, services and other activities provided by a public entity to the public, whether directly or through a contractor, must be accessible to the disabled public. Seller shall provide the services specified in this Agreement in a manner that complies with the ADA and any and all other applicable federal, state and local disability rights legislation. Seller agrees not to discriminate against disabled persons in the provision of services, benefits or activities provided under this Agreement and further agrees that any violation of this prohibition on the part of Seller, its employees, agents or assigns will constitute a material breach of this Agreement.

- (l) Limitations on Contributions. Through execution of this Agreement, Seller acknowledges that it is familiar with Section 1.126 of City's Campaign and Governmental Conduct Code, which prohibits any person who contracts with City for the rendition of personal services or for the furnishing of any material, supplies or equipment to City, whenever such transaction would require approval by City's elective officer of the board on which that elective officer serves, from making any campaign contribution to the officer at any time from the commencement of negotiations for the contract until the later of either: (1) the termination of negotiations for such contract, or (2) three months after the date this Agreement is approved by the City's elective officer or the board on which that elective officer serves.
- (m) Prohibition on Political Activity with City Funds. In accordance with San Francisco Administrative Code Chapter 12.G, Seller may not participate in, support, or attempt to influence any political campaign for a candidate or for a ballot measure in San Francisco (collectively, "Political Activity") in the performance of this Agreement. Seller agrees to comply with San Francisco Administrative Code Chapter 12.G and any implementing rules and regulations promulgated by the Controller. The terms and provisions of Chapter 12.G are incorporated herein by this reference. In the event Seller violates the provisions of this Section, Buyer may, in addition to any other rights or remedies available hereunder, (i) terminate this Agreement, and (ii) prohibit Seller from bidding on or receiving any new City contract for a period of two years. The Controller will not consider Seller's use of profit as a violation of this Section.
- (n) Nondiscrimination Requirements.
- (i) Seller shall comply with the provisions of Chapter 12B of the San Francisco Administrative Code. Seller shall incorporate by reference in all subcontracts the provisions of Sections 12B.2(a) and 12B.2(c)-(k) of the San Francisco Administrative Code and shall require all subcontractors to comply with such provisions. Seller is subject to the enforcement and penalty provisions in Chapters 12B and 12C.
- (ii) Seller represents that it does not as of the date of this Agreement, and will not during the term of this Agreement, in any of its operations in San Francisco, on real property owned by San Francisco, or where work is being performed for the Buyer elsewhere in the United States, discriminate in the provision of employee benefits between employees with domestic partners and employees with spouses and/or between the domestic partners and spouses of such employees, subject to the conditions set forth in San Francisco Administrative Code Section 12B.2.
- (o) Submitting False Claims. The full text of San Francisco Administrative Code Chapter 21, Section 21.35, including the enforcement and penalty provisions, is incorporated into this Agreement. Pursuant to San Francisco Administrative Code Section 21.35, any contractor or subcontractor who submits a false claim shall be liable to Buyer for the statutory penalties set forth in that section. A contractor or subcontractor will be deemed to have submitted a false claim to Buyer if the contractor or subcontractor: (a) knowingly presents or causes to be presented to an officer or employee of Buyer a false claim or request for payment or approval; (b) knowingly makes, uses, or causes to be made or used a false record or statement to get a false claim paid or approved by Buyer; (c) conspires to defraud Buyer by getting a false claim allowed or paid by Buyer; (d) knowingly makes, uses, or causes to be made or used a false record or statement to conceal, avoid, or decrease an obligation to pay or transmit money or property to Buyer; or (e) is a beneficiary of an inadvertent submission of a false claim to Buyer, subsequently discovers the falsity of the claim, and fails to disclose the false claim to Buyer within a reasonable time after discovery of the false claim.

- (p) Use of City Opinion. Seller shall not quote, paraphrase, or otherwise refer to or use any opinion of Buyer, its officers or agents, regarding Seller or Seller's performance under this contract without prior written permission of the Buyer.
- (p) Compliance with Laws. Seller shall keep itself fully informed of the City's Charter, codes, ordinances and regulations of City and of all state, and federal laws in any manner affecting the performance of the Agreement, and must at all times materially comply with such local codes, ordinances, and regulations and all applicable laws as they may be amended from time to time. Buyer use best efforts to provide notice to Seller of any such amendment to the City's Charter, codes, ordinances and regulations of which it becomes aware; however, Seller's obligations under this Section shall not be contingent on notice from Buyer.
- (q) Conflict of Interest. Through its execution of this Agreement, Seller acknowledges that it is familiar with the provision of Section 15.103 of the City's Charter, Article III, Chapter 2 of City's Campaign and Governmental Conduct Code, and Section 87100 et seq. and Section 1090 et seq. of the Government Code of the State of California, and certifies that it does not know of any facts which constitutes a violation of said provisions and agrees that it will immediately notify Buyer if it becomes aware of any such fact during the term of this Agreement.
- (r) Severability. Should any provision of the Agreement be or become void, illegal or unenforceable, the validity or enforceability of the other provisions of the Agreement shall not be affected and shall continue in full force and effect. The Parties shall, however, use their best endeavors to agree on the replacement of the void, illegal, or unenforceable provision(s) with legally acceptable clauses which correspond as closely as possible to the sense and purpose of the affected provision.
- (s) Survival. All rights pursuant to (i) Section 3.5 (Environmental Attributes); Section 4.1(d) (Disputes and Adjustment of Invoices); Article 9 (Events of Default; Remedies; Limitations), (iii) Article 10 (Indemnification), (iv) Section 12.2 (Confidential Information); (v) Section 12.3 (Dispute Resolution/Choice of Law), and (vi) Section 12.4 (Audit); (vii) Section 12.5(m) (Prohibition of Political Use of City Funds); and (viii) Section 12.5(p) (City Opinion) shall also survive termination of this Agreement.

**12.6 Mobile Sierra.** Absent the prior written agreement of all Parties, the standard of review for changes to any rate, charge, term, or condition of service of this Agreement, whether proposed by a Party, a non-party or FERC acting *sua sponte*, shall be the "public interest" standard of review set forth in United Gas Pipe Line Co. v. Mobile Gas Service Corp., 350 U.S. 332 (1956) and Federal Power Commission v. Sierra Pacific Power Co., 350 U.S. 348 (1956).

**12.7 Forward Contract.** The Parties acknowledge and agree that this Agreement constitutes a "forward contract" within the meaning of the United States Bankruptcy Code.

**12.8 Notices.** Unless otherwise stated in this Agreement, any notice, demand, request, or communication required or authorized by this Agreement shall be delivered either by hand, facsimile, electronic mail, overnight courier or mailed by certified mail, return receipt requested with postage prepaid, to the contacts set forth in the Cover Sheet. Either Party may change any information listed in the Notice section of the Cover Sheet, by written notice as provided in this Section. Any such notice, demand, request, or communication shall be deemed received on the Business Day on which the notice was transmitted if delivery was made by hand, facsimile or electronic mail, or (ii) upon receipt by the receiving Party if sent by overnight courier or mailed by certified mail, return receipt requested with postage prepaid.

**12.9 Counterparts.** This Agreement may be executed in one or more counterparts and by different Parties on separate counterparts, all of which shall be deemed one and the same agreement and each of

which shall be deemed an original. Delivery of an executed counterpart of this Agreement by fax or other electronic means shall be deemed as effective as delivery of an originally executed counterpart. Any Party delivering an executed counterpart of this Agreement by facsimile or other electronic means shall also deliver an originally executed counterpart, but the failure of any Party to deliver an originally executed counterpart of this Agreement shall not affect the validity or effectiveness of this Agreement.



IN WITNESS WHEREOF, each of the Parties have caused this Agreement to be duly executed as of the Execution Date. .

**City and County of San Francisco,  
acting by and through  
its Public Utilities Commission, CleanPowerSF**

**[Seller]**

By: \_\_\_\_\_

Harlan J. Kelly, Jr.  
General Manager,  
San Francisco Public Utilities  
Commission

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Approved as to Form:

Dennis J. Herrera  
City Attorney

By: \_\_\_\_\_

Deputy City Attorney

## EXHIBIT A

### SELLER DOCUMENTATION OF CONDITIONS PRECEDENT

[To be revised to reflect development status of the Facility]

Seller shall provide to Buyer all of the following documentation at least five (5) Business Days prior to the Execution Date:

1. A copy of each of (a) the articles of incorporation, certificate of incorporation, operating agreement or similar applicable organizational document of Seller and (b) the by-laws or other similar document of Seller (collectively, "Charter Documents") as in effect, or anticipated to be in effect, on the Execution Date.
2. A certificate from the jurisdiction of Seller's incorporation or organization certifying that Seller is duly organized, validly existing and in good standing under the laws of such jurisdiction.
3. Evidence of Site control (e.g. lease with redacted price terms) satisfactory to Buyer.
4. Evidence of all Permits, including but not limited to, copies of all final environmental review documents.
5. Evidence of CEC Certification or pre-certification, as applicable, satisfactory to Buyer.
6. A copy of the Interconnection Agreement, if any.
7. Insurance documentation as required in Exhibit D.
8. A copy of the Project Labor Agreement for the Facility.
9. A copy of the most recent financial statements (which may be unaudited) from Seller and Seller's Parent together with a certificate from the Chief Financial or equivalent officer of Seller, dated no earlier than ten (10) Business Days prior to the Seller Execution, to the effect that, to the best of such officer's knowledge, (A) such financial statements are true, complete and correct in all material respects and (B) there has been no material adverse change in the financial condition, operations, properties, business or prospects of Seller since the date of such financial statements.
10. A completed Contract Quantity table based on the Facility's Expected Initial Capacity in the form set forth at Exhibit C.

**EXHIBIT B**

**FACILITY DESCRIPTION AND SITE DRAWINGS**

**I. Facility Description**

Facility name:

Assessor's Parcel No:

Facility physical address:

Technology type (including any applicable model):

Expected Initial Capacity:

Interconnection Point of Facility:

Local Capacity Area:

**II. Site Drawings**

**[INSERT SITE MAP]**

**[INSERT ONE-LINE DIAGRAM FOR  
INTERCONNECTION FACILITIES AND METERING]**

**EXHIBIT C**

**CONTRACT QUANTITY**

<b>Contract Year</b>	<b>Contract Quantity (in MWh)</b>
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
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25	
26	
27	
28	
29	
30	

\_\_\_\_\_ Dated as of Seller Execution, with the Contract Quantity for Contract Year 1 based on the Expected Initial Capacity of \_\_\_ MW AC and each subsequent Contract Year reduced by a degradation factor of \_\_\_%.

\_\_\_\_\_ Dated as of Commercial Operation Date, with the Contract Quantity for Contract Year 1 based on the Initial Capacity of \_\_\_ MW AC (subject to the Initial Capacity limitations described in Section 2.3(c)(2) of the Agreement and each subsequent Contract Year reduced by a degradation factor of \_\_\_%.

## EXHIBIT D

### INSURANCE COVERAGES

1. **Liability Coverages.** Without in any way limiting Seller's liability pursuant to the "Indemnification" section of this Agreement, Seller must maintain in force, during the full term of the Agreement, insurance in the following amounts and coverages and be responsible for its subcontractors, including Seller's EPC Contractors, maintaining sufficient limits of the appropriate insurance:

- (a) Workers' Compensation, in statutory amounts, with Employers' Liability Limits not less than \$1,000,000 each accident, injury, or illness; and
- (b) Commercial General Liability Insurance with limits not less than \$1,000,000 each occurrence and \$2,000,000 general aggregate for Bodily Injury and Property Damage, including Contractual Liability, Personal Injury, Products and Completed Operations; and
- (c) Commercial Automobile Liability Insurance with limits not less than \$1,000,000 each occurrence, "Combined Single Limit" for Bodily Injury and Property Damage, including Owned, Non-Owned and Hired auto coverage, as applicable.

2. **Additional Coverages**

- (a) Property insurance, on an all-risk form, including earthquake and flood, for one hundred percent (100%) of the full replacement value of the Site and Facility. Such insurance shall include Business Interruption coverage in an amount equal to twelve months of revenue from this Agreement.

3. **Endorsements.**

- (a) Commercial General Liability and Commercial Automobile Liability Insurance policies must be endorsed to provide:
  - (i) Name as Additional Insured, the City and County of San Francisco, its Officers, Agents, and Employees.
  - (ii) That such policies are primary insurance to any other insurance available to the Additional Insureds, with respect to any claims arising out of this Agreement, and that insurance applies separately to each insured against whom claim is made or suit is brought.
- (b) All policies shall be endorsed to provide thirty (30) days' advance written notice to Buyer of cancellation for any reason, intended non-renewal, or reduction in coverages.

4. **Length of Coverage.** Should any of the required insurance be provided under a claims-made form, Seller shall maintain such coverage continuously throughout the term of this Agreement and, without lapse, for a period of three years beyond the expiration of this Agreement, to the effect that, should occurrences during the Term give rise to claims made after expiration of the Agreement, such claims shall be covered by such claims-made policies.

5. **Maintenance of Coverage.** Should any required insurance lapse during the term of this Agreement, requests for payments originating after such lapse shall not be processed until the Buyer receives satisfactory evidence of reinstated coverage as required by this Agreement, effective as of the lapse date. If insurance is not reinstated, Buyer may, at its sole option, terminate this Agreement effective on the date of such lapse of insurance.

6. **Certificates.** Prior to commencement of the Term, Seller shall furnish to Buyer certificates of insurance and additional insured policy endorsements with insurers with ratings comparable to A-, VIII or higher, that are authorized to do business in the State of California, and that are satisfactory to Buyer, in form evidencing all coverages set forth above. Approval of the insurance by Buyer shall not relieve or decrease Seller's liability hereunder.

## **EXHIBIT E**

### **SCHEDULING PROTOCOLS**

Following the Execution Date, the Parties shall agree on Scheduling Protocols, which shall be consistent with the CAISO Tariff, customary industry practice, and the Facility's operational parameters (including as to levels and timing of curtailments), such agreement not to be unreasonably withheld by either Party.

**EXHIBIT F**

**CONSTRUCTION START  
FORM OF CERTIFICATION**

\_\_\_\_ (Date) \_\_\_\_\_

This certification ("Certification") of the Construction Start Date is delivered by \_\_\_\_\_ ("Seller") to the City and County of San Francisco, acting by and through its Public Utilities Commission, CleanPowerSF, ("Buyer") in accordance with the terms of that certain Renewable Power Purchase Agreement dated \_\_\_\_\_ ("Agreement") by and between Seller and Buyer. All capitalized terms used in this Certification but not otherwise defined herein shall have the respective meanings assigned to such terms in the Agreement. Seller hereby certifies and represents to Buyer all of the following:

- a) the EPC Contract related to the Facility was executed on \_\_\_\_\_ with [EPC Contractor name];
- b) [permitting agency name] \_ issued grading permits to the Seller on \_\_\_\_\_;
- c) the Notice to Proceed was issued on \_\_\_\_\_ (attached), and;
- d) mobilization at the Facility Site commenced on \_\_\_\_\_.

IN WITNESS WHEREOF, the undersigned has executed this certificate on behalf of the Seller as of the \_\_\_\_ day of \_\_\_\_\_.

**Seller:**

**[Licensed Professional Engineer]**

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

License Number and LPE Stamp: \_\_\_\_\_

[TO BE AMENDED BASED ON DEVELOPMENT STATUS OF FACILITY]

EXHIBIT G

FORM OF QUARTERLY PROGRESS REPORT

INSTRUCTIONS.

Any capitalized terms used in this report which are not defined herein shall have the meaning ascribed to them in the Renewable Power Purchase Agreement by and between \_\_\_\_\_, (“Seller”) and the City and County of San Francisco, acting by and through its Public Utilities Commission, CleanPowerSF, (“Buyer”) dated \_\_\_\_\_ (the “Agreement”).

Commencing in the calendar month of the effective date of the Agreement, and every three months thereafter (“Calendar Quarter”), Seller shall prepare and submit to Buyer a Progress Report containing the information set forth in this Exhibit F-1 (“Progress Report”). The Progress Report shall review the status of each Milestone of the construction schedule for the Facility and Seller shall identify any issue which in Seller’s reasonable judgment are expected to adversely affect the schedule, and with respect to any such matters, shall state the actions which Seller intends to take to ensure that the Milestones will be attained by their required dates. Such matters may include, but shall not be limited to:

- (a) Any material matter or issue arising in connection with a Permit, or compliance therewith, with respect to which there is an actual or threatened dispute over the interpretation of an Applicable Law, actual or threatened opposition to the granting of a necessary Permit, any organized public opposition, any action or expenditure required for compliance or obtaining approval that Seller is unwilling to take or make, or in each case which could reasonably be expected to materially threaten or prevent financing of the Facility, attaining any Milestone, or obtaining any contemplated agreements with other Persons which are necessary for attaining any Milestone or which otherwise reasonably could be expected to materially threaten Seller’s ability to attain any Milestone.
- (b) Any development or event in the financial markets or the independent power industry, any change in taxation or accounting standards or practices or in Seller’s business or prospects which reasonably could be expected to materially threaten financing of the Facility, attainment of any Milestone or materially threaten any contemplated agreements with other parties which are necessary for attaining any Milestone or could otherwise reasonably be expected to materially threaten Seller’s ability to attain any Milestone;
- (c) A change in, or discovery by Seller of, any legal or regulatory requirement which would reasonably be expected to materially threaten Seller’s ability to attain any Milestone;
- (d) Any material change in the Seller’s schedule for initiating or completing any material aspect of the Facility;
- (e) The status of any matter or issue identified as outstanding in any prior Progress Report and any material change in the Seller’s proposed actions to remedy or overcome such matter or issue.

Each overview subsection shall include a summary of the status and progress of major activities associated with that section, whether planned, in progress, or completed, including relevant dates. Each “recent activities” subsection shall include details of activities during the previous month. Each “expected activities” subsection shall include a brief list of major activities planned for the current month.



Seller shall complete, certify, and deliver this form of Progress Report to \_\_\_\_\_, together with all attachments and exhibits.

**1. Executive Summary**

Provide an overview of the Facility, including technology, size, location, and ownership, and a brief chronological cumulative summary of the **major** activities completed at the Facility. Include the date each item was added to the summary.

**2. Financing Activities.**

**2.1 Overview of financing activities.** Provide a summary of the status and progress of each major financing activity, including the date of execution of significant documents, and information on the expected timing of future significant activities.

**2.2 Recent financing activities.** Describe in detail the financing activities that occurred during the previous Calendar Quarter.

**2.3 Expected financing activities.** List the financing activities that are expected to be performed during the current Calendar Quarter.

**3. Major Equipment Procurement**

**3.1 Overview of major equipment procurement activities.** For each type of equipment, list the number of each major item to be procured, the manufacturer, model number (if applicable), and rating. List the delivery schedule (expected or actual as applicable), breaking out the number of each item to be procured or delivered in each Calendar Quarter.

**3.2 Recent major equipment procurement activities.** Describe in detail the major equipment procurement activities that occurred during the previous Calendar Quarter.

**3.3 Expected major equipment procurement activities.** List the major equipment procurement activities that are expected to be performed during the current Calendar Quarter.

**4. Construction Activities.** Include information on the status of any construction-related factors that may affect the ability of the Facility to deliver Product to the Buyer. Include information on the Facility infrastructure, generating equipment, and major auxiliary equipment. Also include information on the substations, switchyards, gen-ties, telecommunications equipment or other interconnection facilities that are the direct responsibility of the Facility.

**4.1 Overview of major construction activities.** Provide a summary of the status and progress of each major construction activity for all portions of the Facility, including a schedule showing expected or actual dates as applicable. Provide the name of the EPC Contractor, the date of execution of the EPC Contract, and the date of issuance of a full Notice to Proceed (or equivalent). For each major type of equipment, break out the number of each item (to be) installed and/or commissioned in each Calendar Quarter.

**4.2 Look-ahead construction schedule.** Provide a look-ahead construction schedule covering the following Calendar Quarter.

**5. Interconnection Activities.** Include information on interconnection-related factors that may affect the ability of the Facility to deliver Product to the Buyer. Include information on the status of interconnection studies, Interconnection Agreements, design and construction of Interconnection Facilities (e.g., substations, switchyards, gen-ties, system protection schemes, telecommunications equipment to the extent not already covered in the Facility construction information), Network Upgrades, and grid outage and/or interconnection schedules.

**5.1 Overview of interconnection activities.** Provide a summary of the status and progress of each major interconnection activity including dates of completion of significant activities and expected timing of future activities.

**5.2 Recent interconnection activities.** Describe in detail the interconnection activities that occurred during the previous Calendar Quarter.

**5.3 Expected interconnection activities.** List the interconnection activities that are expected to be performed during the current Calendar Quarter.

**6. Startup.** Include information on the status of activities related to preparation for Commercial Operation, including progress towards the items set forth in Exhibit F-3: Attachment 1, requirements and notifications of the grid operator and PTO, and any other activities that must be conducted before the Facility may deliver Energy to the grid and/or declare Commercial Operation.

**6.1 Overview of startup activities.** Provide a summary of the status and progress of each major startup activity including dates of completion of significant activities and expected timing of future activities.

**6.2 Recent startup activities.** Describe in detail the startup activities that occurred during the previous Calendar Quarter.

**6.3 Expected startup activities.** List the startup activities that are expected to be performed during the current Calendar Quarter.

I, \_\_\_\_\_, on behalf of and as an authorized representative of \_\_\_\_\_, do hereby certify that the information contained in this Progress Report is true and accurate, and reflects, to the best of my knowledge, the current status of the construction of the Facility as of the date specified below.

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## EXHIBIT H-1

### COMMERCIAL OPERATION CERTIFICATION PROCEDURE

In accordance with the terms of that certain Renewable Power Purchase Agreement dated \_\_\_\_\_ by and between the City and County of San Francisco, acting by and through its Public Utilities Commission, CleanPowerSF ("Buyer") and \_\_\_\_\_ ("Seller") to declare and recognize the Commercial Operation Date of the Facility, Seller shall provide all of the documents set forth herein to Buyer as of the Commercial Operation Date. All terms not defined herein shall have the meaning set forth in the Agreement.

1. A certification from an authorized officer of Seller, substantially in the form of Exhibit H-2 dated as of the Commercial Operation Date; and
2. A certificate or report from a Licensed Professional Engineer containing all of the following:
  - (a) A statement that the Facility has achieved Mechanical Completion and the date on which it was achieved;
  - (b) A statement that the Facility has successfully completed Facility Testing and the dates on which Seller has accepted the test results; and
  - (c) A statement that the Facility has achieved Substantial Completion and the date on which it was achieved.
3. Seller has provided to Buyer all documents which demonstrate that Seller has satisfied all of the applicable requirements for the interconnection of the Facility to the CAISO Grid and delivery of Product to the Delivery Point.
4. Seller has provided final Site Drawings to Buyer.
5. Definitions.
  - (a) "Mechanical Completion" means that (i) all components and systems of the Facility have been properly constructed, installed and functionally tested according to EPC Contract requirements in a safe and prudent manner that does not void any equipment or system warranties or violate any permits, approvals or Laws; (ii) the Facility is ready for startup testing and commissioning; (iii) Seller has provided written acceptance to the EPC Contractor of mechanical completion as that term is specifically defined in the EPC Contract.
  - (b) "Facility Testing Completion" means the written acceptance to the EPC Contractor of the completion of startup testing / commissioning, emissions testing (as applicable), and performance / acceptance / warranty testing (all such testing shall be collectively referred to as "Facility Testing") as required under the EPC Contract. The objectives of the tests shall be generally (i) to verify that the Facility has been properly designed and constructed to meet the performance and operating requirements of the EPC Contract; (ii) to assure warranty coverage for equipment and systems over their warranty periods.
  - (c) "Substantial Completion" means when the following has occurred: (i) the Facility is sufficiently complete, in accordance with the EPC Contract, that Seller has full and unrestricted use and benefit of the Facility in the use for which it is intended; (ii) the Facility has achieved Mechanical Completion; (iii) utilities are fully connected and operating normally; (iv) all necessary permits have been issued; (v) the Facility is fully and properly interconnected and synchronized with the electrical grid and is capable of producing electricity in accordance with the EPC Contract; (vi) the operating manual has been approved by Seller; (vii) all work other than incidental corrective and incidental punch list

work is complete; and (viii) Seller has provided written acceptance to the EPC Contractor of substantial completion as that term is specifically defined in the EPC Contract.

**EXHIBIT H-2  
COMMERCIAL OPERATION  
FORM OF CERTIFICATION**

This certification ("Certification") of Commercial Operation is delivered by \_\_\_\_\_ ("Seller") to the City and County of San Francisco, acting by and through its Public Utilities Commission, CleanPowerSF ("Buyer") in accordance with the terms of that certain Renewable Power Purchase Agreement dated \_\_\_\_\_ ("Agreement") by and between Seller and Buyer. All capitalized terms used in this Certification but not otherwise defined herein shall have the respective meanings assigned to such terms in the Agreement.

Seller hereby certifies and represents to Buyer the following:

1. Mechanical Completion of the Facility was achieved on \_\_\_\_\_ [DATE]\_\_\_\_\_.
2. Facility Testing Completion successfully occurred on: *[Seller to indicate each type of Facility Testing and date completed]*
  - (a) NAME OF TEST [DATE]
  - (b) NAME OF TEST [DATE]
  - (c) NAME OF TEST [DATE]
3. Substantial Completion of the Facility was achieved on \_\_\_\_\_ [DATE]\_\_\_\_\_.
4. Pre-parallel inspection of the Facility was successfully completed on \_\_\_\_\_ [DATE]\_\_\_\_\_.
5. Authorization to parallel the Facility was obtained on \_\_\_\_\_ [DATE]\_\_\_\_\_.
6. Telemetry / SCADA visibility with PTO and CAISO grid control and power dispatch centers was obtained for the Facility on \_\_\_\_\_ [DATE]\_\_\_\_\_.
7. Reliability Network Upgrades (as defined in the CAISO Tariff) were completed on the Facility on \_\_\_\_\_ [DATE]\_\_\_\_\_.
8. Power system stabilizer testing and calibration was obtained for the Facility on \_\_\_\_\_ [DATE]\_\_\_\_\_ or,  was not required.
9. Full Capacity Deliverability Status Finding from CAISO was obtained for the Facility on \_\_\_\_\_ [DATE]\_\_\_\_\_ or,  was not required because the Facility is Energy Only.
10. The Participating Transmission Provider or Distribution Provider has provided documentation supporting full unrestricted release for Commercial Operation by [Name of Participating Transmission Owner as appropriate] on \_\_\_\_\_ [DATE]\_\_\_\_\_.
11. The CAISO has provided notification supporting Commercial Operation, in accordance with the CAISO tariff on \_\_\_\_\_ [DATE]\_\_\_\_\_.

A certified statement of the Licensed Professional Engineer, attached hereto, has been provided as evidence of Commercial Operation of the Facility to provide Product and meet, at a minimum, the requirements indicated herein.

EXECUTED by SELLER this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

**Seller**

**[Licensed Professional Engineer]**

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

License Number and LPE Stamp: \_\_\_\_\_

**EXHIBIT I**

**INITIAL ENERGY DELIVERY DATE CONFIRMATION LETTER**

In accordance with the terms of that certain Renewable Power Purchase Agreement dated \_\_\_\_\_ (“Agreement”) by and between the City and County of San Francisco, acting by and through its Public Utilities Commission, CleanPowerSF, (“Buyer”) and \_\_\_\_\_ (“Seller”), this letter (“Initial Energy Delivery Date Confirmation Letter”) serves to document the Parties’ further agreement that (i) the Conditions Precedent to the occurrence of the Initial Energy Delivery Date have been satisfied, and (ii) Buyer has accepted delivery of the Product, as specified in the Agreement, as of this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ (the “Initial Energy Delivery Date”). All capitalized terms not defined herein shall have the meaning set forth in the Agreement.

Seller represents to Buyer that it has been granted status as an [Exempt Wholesale Generator] [Qualifying Facility]. In addition, Seller provides the following FERC Tariff information for reference purposes only:

Tariff:                      Dated:                      Docket Number

IN WITNESS WHEREOF, each Party has caused this Initial Energy Delivery Date Confirmation Letter to be duly executed by its authorized representative as of the date of last signature provided below:

City and County of San Francisco, acting  
by and through its Public Utilities Commission,  
CleanPowerSF

Seller

By: \_\_\_\_\_  
Michael Hyams  
Manager, CleanPowerSF  
San Francisco Public Utilities Commission

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

**EXHIBIT J-1**

**CAPACITY TEST PROCEDURE**

**[To be developed by Buyer and Seller by using CAISO test procedures for the applicable technology]**

**EXHIBIT J-2**

**INSTALLED CAPACITY CERTIFICATE**

This certification of Installed Capacity is delivered by [licensed professional engineer] to the City and County of San Francisco, acting by and through its Public Utilities Commission, CleanPowerSF, in accordance with the terms of the Renewable Power Purchase Agreement dated \_\_\_\_\_, (“Agreement”) by and between Buyer and Seller. All capitalized terms used in this Certification but not otherwise defined herein shall have the meanings set forth in the Agreement.

The initial Facility performance test under Seller’s EPC contract for the Facility demonstrated peak Facility electrical output of \_\_\_\_ MW AC at the Delivery Point, as adjusted for ambient conditions on the date of the performance test. (“Installed Capacity”).

EXECUTED BY [LICENSED PROFESSIONAL ENGINEER]

This \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

**[Licensed Professional Engineer]**

Signature: \_\_\_\_\_

Name: \_\_\_\_\_



EXHIBIT K-1

FORM OF LETTER OF CREDIT

[Issuing Bank Letterhead and Address]

STANDBY LETTER OF CREDIT NO. XXXXXXXXX

Date: [Insert issue date]

**Beneficiary:** City and County of San Francisco, acting by and through its Public Utilities Commission, CleanPowerSF  
525 Golden Gate Avenue  
San Francisco, CA 94102  
Attn:

**Applicant:** [Insert name and address of Applicant]

Letter of Credit Amount: [insert Amount]

Expiry Date: [insert expiry date]

Ladies and Gentlemen:

By order of [insert name of Applicant] ("Applicant"), we hereby issue in favor of the City and County of San Francisco, acting by and through its Public Utilities Commission, CleanPowerSF, (the "Beneficiary") our irrevocable standby letter of credit No. [insert number of letter of credit] ("Letter of Credit"), for the account of Applicant, for drawings up to but not to exceed the aggregate sum of U.S. \$ [insert amount in figures followed by (amount in words)] ("Letter of Credit Amount"). This Letter of Credit is available with [insert name of issuing bank, and the city and state in which it is located] by sight payment, at our offices located at the address stated below, effective immediately, and it shall expire at our close of business on [insert expiry date] (the "Expiry Date").

Funds under this Letter of Credit are available to the Beneficiary against presentation of the following documents:

1. Beneficiary's signed and dated sight draft in the form of Exhibit A hereto, referencing this Letter of Credit No. [insert number] and stating the amount of the demand; and
2. One of the following statements signed by an authorized representative or officer of Beneficiary:
  - A. Pursuant to the terms of that certain [insert name of the agreement] (the "Agreement"), dated [insert date of the Agreement], between Beneficiary and [insert name of Seller under the Agreement], Beneficiary is entitled to draw under Letter of Credit No. [insert number] amounts owed by [insert name of Seller under the Agreement] under the Agreement; or
  - B. "Letter of Credit No. [insert number] shall expire in thirty (30) days or less and [insert name of Seller under the Agreement] has not provided replacement security acceptable to Beneficiary.

Special Conditions:

1. Partial and multiple drawings under this Letter of Credit are allowed;
2. All banking charges associated with this Letter of Credit are for the account of the Applicant;
3. This Letter of Credit is not transferable; and
4. The Expiry Date of this Letter of Credit shall be automatically extended without a written amendment for a period of one year and on each successive Expiry Date, unless at least sixty (60) days before the then current Expiry Date, we notify you by registered mail or courier that we elect not to extend the Expiry Date of this Letter of Credit for such additional period.

We engage with you that drafts drawn under and in compliance with the terms of this Letter of Credit shall be duly honored upon presentation, on or before the Expiry Date (or after the Expiry Date as provided below), at our offices at **[insert issuing bank's address for drawings]**.

All demands for payment shall be made by presentation of originals or copies of documents; or by facsimile transmission of documents to **[insert fax number]**, Attention: **[insert name of issuing bank's receiving department]**, with originals or copies of documents to follow by overnight mail. If presentation is made by facsimile transmission, you may contact us at **[insert phone number]** to confirm our receipt of the transmission. Your failure to seek such a telephone confirmation does not affect our obligation to honor such a presentation.

Our payments against complying presentations under this Letter of Credit shall be made no later than on the sixth (6th) banking day following a complying presentation.

Except as stated herein, this Letter of Credit is not subject to any condition or qualification. It is our individual obligation, which is not contingent upon reimbursement and is not affected by any agreement, document, or instrument between us and the Applicant or between the Beneficiary and the Applicant or any other party.

Except as otherwise specifically stated herein, this Letter of Credit is subject to and governed by the *Uniform Customs and Practice for Documentary Credits, 2007 Revision*, International Chamber of Commerce (ICC) Publication No. 600 (the "UCP 600"); provided that, if this Letter of Credit expires during an interruption of our business as described in Article 36 of the UCP 600, we shall honor drafts presented in compliance with this Letter of Credit within thirty (30) days after the resumption of our business and effect payment accordingly. The law of the State of New York shall apply to any matters not covered by the UCP 600.

For telephone assistance regarding this Letter of Credit, please contact us at **[insert number and any other necessary details]**.

**EXHIBIT K-2**

**SIGHT DRAFT**

TO: [INSERT NAME AND ADDRESS OF PAYING BANK]

AMOUNT: \$

DATE:

AT SIGHT OF THIS DEMAND PAY TO THE ORDER OF \_\_\_\_\_ THE

AMOUNT OF U.S.\$ \_\_\_\_\_ (\_\_\_\_\_ U.S. DOLLARS)

DRAWN UNDER [INSERT NAME OF ISSUING BANK] LETTER OF CREDIT NO. XXXXXX.

REMIT FUNDS AS FOLLOWS:

[INSERT PAYMENT INSTRUCTIONS]

DRAWER

BY: \_\_\_\_\_  
NAME AND TITLE

**EXHIBIT M**

**NOTIFICATION REQUIREMENTS FOR AVAILABLE CAPACITY AND PROJECT  
OUTAGES AND CURTAILMENTS**

**1. Notification Requirements For Routine Start-Up and Shutdowns**

Prior to paralleling or after disconnecting from the electric system, ALWAYS follow your balancing authority rules and notify the applicable Participating Transmission Owner's (PTO) switching center.

- Call the applicable Participating Transmission Owner's (PTO) switching center and Buyer at \_\_\_\_\_ to advise of the intent to parallel before any Start-up.
- Call the applicable Participating Transmission Owner's (PTO) switching center and Buyer at \_\_\_\_\_ after the unit has been paralleled and report the parallel time and intended unit output.
- Call the applicable Participant Transmission Owner's (PTO) switching center and Buyer at \_\_\_\_\_ after any routine separation and report the separation time as well as the date and time estimate for return to service.

**2. Submission of Available Capacity and Planned Outages**

Submit information as set forth below:

- a. For all email correspondence: \_\_\_\_\_
- b. For Annual Forecasts of Available Capacity: \_\_\_\_\_,
- c. For Monthly and Weekly Forecasts of Available Capacity: \_\_\_\_\_
- d. For Hourly Forecasts of Available Capacity: \_\_\_\_\_
- e. For Planned Outages: \_\_\_\_\_ Include the following information:
  - i. Start Date and Start Time
  - ii. Estimated or Actual End Date and End Time for Outage
  - iii. Date and time when reported to Buyer and name(s) of Buyer's representative(s) contacted
  - iv. Description of additional information as needed, including, but not limited to, changes to a Planned Outage.
  - v. Contact name: first and last name of the individual at the Facility to contact regarding the outage(s) at issue in the email.

**3. Forced Outage Reporting**

- a. Forced Outages – Seller shall notify Buyer verbally at \_\_\_\_\_ ten (10) minutes of event or as soon as reasonably possible, after the safety of all personnel and securing of all facility equipment.

- a. Verbal notification shall include time of Forced Outage, cause, expected duration, and capacity reduction.
- b. After verbally notifying Buyer of the Forced Outage, Seller shall also take commercially reasonable efforts to notify Buyer's Scheduling Coordinator.
- c. As soon as practicable, but no later than forty-eight (48) hours after the commencement of the Forced Outage, Seller shall provide Buyer with an email to \_\_\_\_\_.

1. Type of Outage: Forced Outage
2. Start Date and Start Time
3. Estimated or Actual End Date and End Time
4. Date and time when reported to PG&E and name(s) of PG&E representative(s) contacted.
5. Text description of additional information as needed.
6. Primary and secondary causes of Forced Outage, including a detailed description of specific equipment involved and the nature of the problem or condition.
7. Equipment description and nature of work being performed. For generation outages, include NERC Generation Availability Data System (GADS) numbers (as available) that identify the specific equipment and type of work that affect restrictions. Include additional equipment designations as available.
8. Text description of additional information as needed, including, but not limited to, changes to a previously scheduled Outage, links/cross-references to related outage cards and log entries, outage classifications per the CAISO Tariff, etc.
9. Associated events, e.g. operation of Special Protection Schemes.
10. Impact on CAISO-controlled Grid.

#### 4. Buyer Curtailment Orders

Operational characteristics of the Project for Buyer Curtailment Orders are listed below. Buyer, as the Scheduling Coordinator, may request that CAISO modify the Master File for the Project to reflect the findings of a CAISO audit of the Project. In addition, Seller agrees to coordinate with Buyer or Third-Party SC, as applicable, to ensure all information provided to the CAISO regarding the operational and technical constraints in the Master File for the Project are accurate and are based on the true physical characteristics of the resource.

- PMax of the Project: \_\_\_\_ MW
- Minimum operating capacity: \_\_\_\_ MW
- Ramp Rate: \_\_\_\_ MW/Minute

#### *[For As-Available Products]*

- Advance notification required for Buyer Bid Curtailment and Buyer Curtailment Order: Not greater than the shortest Dispatch Interval in the Real-Time Market (as defined in the CAISO Tariff).

- Maximum number of Start-ups per calendar day (if any such operational limitations exist):  
\_\_\_\_\_

***[For Baseload Products]***

- Maximum number of Start-ups per calendar day, month, year (if any such operational limitations exist): \_\_\_\_\_
- Advance notification required for Buyer Bid Curtailment and Buyer Curtailment Order: Not greater than the shortest Dispatch Interval in the Real-Time Market (as defined in the CAISO Tariff).

**Other Requirements:**

- Maximum number of hours annually for Buyer Curtailment Periods: unlimited hours
- The Project will be capable of receiving and responding to all Dispatch Instruction in accordance with Section 3.1(q).
- Start-Up Time (if applicable): \_\_\_\_\_ Minutes
- Minimum Run Time after Start-Up (if applicable): \_\_\_\_\_ Minutes
- Minimum Down Time after Shut-Down (if applicable): \_\_\_\_\_ Minute

**EXHIBIT N**

**NEW EXHIBIT**

**REPLACEMENT RA CAPACITY**

1. Pursuant to Section 3.2(c) of the Agreement, Seller shall provide to Buyer, pursuant to the terms of this Exhibit N, the Replacement RA Capacity in the Quantity set forth in Section 3 of this Exhibit N. This Agreement confers to Buyer the right to include the Replacement RA Capacity in RAR Showings, LAR Showings, FCR Showings, if applicable, and any other capacity or resource adequacy markets or proceedings as specified in this Exhibit. The Replacement RA Capacity does not give Buyer any right to the electrical output from the Units and no energy or ancillary services associated with any Unit is required to be made available to Buyer as part of this Agreement. Buyer shall not be responsible for compensating Seller for Seller's commitments to the CAISO required by this Agreement. Seller retains the right to sell any RA Capacity from a Unit in excess of that Unit's Replacement RA Capacity Quantity and any RAR Attributes, LAR Attributes or FCR Attributes not otherwise transferred, conveyed, or sold to Buyer under this Agreement.

2. Unit Information:

Name	
Location	
CAISO Resource ID	
Unit SCID	
Resource Type	
Resource Category (1, 2, 3 or 4)	
Path 26 (North or South)	
Local Capacity Area (if any, as of Confirmation Effective Date)	
Deliverability restrictions, if any, as described in most recent CAISO deliverability assessment	
Run Hour Restrictions	
Product Type (Flexible/Generic)	
If Generic: Unit NQC (as of the Confirmation Effective Date)	
If Flexible: Unit EFC (as of the Confirmation Effective Date)	
Flexible Capacity Category (1, 2 or 3)	

3. Replacement RA Capacity Quantity:

Month/Year	RAR Contract Quantity (MWs)	FCR Contract Quantity (MWs)	Local RAR Contract Quantity (MWs)	Local FCR Contract Quantity (MWs)

4. Seller shall provide Buyer with Replacement RA Capacity from the Units in the amount of the Replacement RA Capacity Quantity. If those Units are not available to provide the full amount of the Contract Quantity for any reason other than a Force Majeure, including without limitation, any Outage or any adjustment of the RA Capacity for any Unit, then Seller shall be liable for damages and/or required to indemnify Buyer for any resulting penalties or fines pursuant to the terms of Section 5 of this Exhibit N. In addition, the Contract Price applicable to energy deliveries in a Showing Month with a Replacement RA Capacity shortfall shall be calculated as the (percentage shortfall in RA Capacity Quantity x the Delivered Energy) x 80% of the Contract Price plus (100% of the Contract Price for the remaining quantities of Delivered Energy).

5. Seller shall provide Buyer with the Replacement RA Capacity for each Showing Month as follows:

- (a) Seller shall on a timely basis submit, or cause the Unit's Scheduling Coordinator to submit, by the Notification Deadline, Supply Plans to the CAISO, LRA, or other applicable Governmental Authority identifying and confirming the Replacement RA Capacity to be provided to Buyer for the applicable Showing Month, unless specifically requested by Buyer not to do so.
- (b) Seller shall or shall cause the Unit's Scheduling Coordinator to submit written notification to Buyer, no later than the Notification Deadline, that Buyer will be credited with the Replacement RA Capacity for such Showing Month in the Unit's Scheduling Coordinator Supply Plan so that the Replacement RA Capacity credited equals the Replacement RA Capacity Quantity for such Showing Month.

6. Subject to any adjustments made pursuant to Section 4, Seller agrees to indemnify, defend and hold harmless Buyer from any penalties, fines or costs assessed against Buyer by the CPUC or the CAISO, resulting from any of the following:

- (c) Seller's failure to provide any portion of the Replacement RA Capacity if the failure is not excused under this Exhibit N or by Buyer's failure to perform;
- (d) A Unit Scheduling Coordinator's failure to timely submit accurate Supply Plans that identify Buyer's right to the Replacement RA Capacity purchased hereunder; or
- (e) A Unit Scheduling Coordinator's failure to submit accurate Supply Plans that identify Buyer's right to the Replacement RA Capacity purchased under this Exhibit N.

With respect to the foregoing, the Parties shall use commercially reasonable efforts to minimize such penalties, fines and costs; provided, that in no event shall Buyer be required to use or change its utilization of its owned or controlled assets or market positions to minimize these penalties and fines. If Seller fails to pay the foregoing penalties, fines or costs, or fails to reimburse Buyer for those



penalties, fines or costs, then Buyer may offset those penalties, fines or costs against any future amounts it may owe to Seller under this Agreement.

7. Allocation of Other Payments and Costs. Seller may retain any revenues it may receive from the CAISO or any other third party with respect to any Unit for (a) start-up, shut-down, and minimum load costs, (b) capacity revenue for ancillary services, (c) energy sales, (d) any revenues for black start or reactive power services, or (e) the sale of the unit-contingent call rights on the generation capacity of the Unit to provide energy to a third party, so long as such rights do not confer on such third party the right to claim any portion of the Replacement RA Capacity sold hereunder in order to make an RAR Showing, LAR Showing, FCR Showing, or any similar capacity or resource adequacy showing with the CAISO or CPUC. Buyer acknowledges and agrees that all Availability Incentive Payments are for the benefit of Seller and for Seller's account, and that Seller shall receive, retain, or be entitled to receive all credits, payments, and revenues, if any, resulting from Seller achieving or exceeding Availability Standards. The Parties acknowledge and agree that any Non-Availability Charges are the responsibility of Seller, and for Seller's account and Seller shall be responsible for all fees, charges, or penalties, if any, resulting from Seller failing to achieve Availability Standards. However, Buyer shall be entitled to receive and retain all revenues associated with the Firm RA Capacity of any Unit during the Delivery Period (including any capacity or availability revenues from RMR Agreements for any Unit, Reliability Compensation Services Tariff, and Residual Unit Commitment capacity payments, but excluding payments described in clauses (a) through (c) above). All such revenues received by Seller, or a Unit's SC, owner, or operator shall be remitted to Buyer, and Seller shall pay such revenues to Buyer if the Unit's SC, owner, or operator fails to remit those revenues to Buyer. If Seller fails to pay such revenues to Buyer, Buyer may offset any amounts owing to it for such revenues against any future amounts it may owe to Seller under this Agreement. If a centralized capacity market develops within the CAISO region, Buyer will have exclusive rights to offer, bid, or otherwise submit Replacement RA Capacity provided to Buyer pursuant to this Agreement for re-sale in such market, and retain and receive any and all related revenues.

8. CAISO Offer Requirements. During the Delivery Period, except to the extent any Unit is in an Outage, or is affected by an event of Force Majeure that results in a partial or full Outage of that Unit, Seller shall either schedule or cause the Unit's Scheduling Coordinator to schedule with, or make available to, the CAISO each Unit's RA Capacity in compliance with the CAISO Tariff, and shall perform all, or cause the RA Unit's Scheduling Coordinator, owner, or operator, as applicable, to perform all obligations under the CAISO Tariff that are associated with the sale of Replacement RA Capacity hereunder. Buyer shall have no liability for the failure of Seller or the failure of any Unit's Scheduling Coordinator, owner, or operator to comply with such CAISO Tariff provisions, including any penalties or fines imposed on Seller or the Unit's Scheduling Coordinator, owner, or operator for such noncompliance.

9. Other Buyer and Seller Covenants.

9.1 In addition to the representations and covenants set forth in the Agreement, Buyer and Seller shall, throughout the Delivery Period, take all commercially reasonable actions and execute any and all documents or instruments reasonably necessary to ensure Buyer's right to the use of the Replacement RA Capacity Quantity for the sole benefit of Buyer's RAR, LAR and/or FCR, as applicable. Such commercially reasonable actions shall include, without limitation:

- (a) Cooperating with and providing, and in the case of Seller causing, each Unit's Scheduling Coordinator, owner, or operator to cooperate with and provide requested supporting documentation to the CAISO, the CPUC, or any other Governmental Authority responsible for administering RAR, LAR and/or FCR under Applicable Laws, to certify or qualify the Replacement RA Capacity Quantity as Capacity Attributes and Firm RA Capacity. Such actions shall include, without limitation, providing information requested by the CAISO, the CPUC, or by an LRA having jurisdiction, to demonstrate for each month of the Delivery Period the ability to deliver the Replacement RA Capacity Quantity from each RA Unit to the CAISO Controlled

Grid for the minimum hours required to qualify as Capacity Attributes, and providing information requested by the CPUC, the CAISO or other Governmental Authority having jurisdiction to administer RAR, LAR or FCR to demonstrate that the RA Contract Quantity can be delivered to the CAISO Controlled Grid, pursuant to "deliverability" standards established by the CAISO, or other Governmental Authority having jurisdiction to administer RAR, LAR and/or FCR; and

- (b) Negotiating in good faith to make necessary amendments, if any, to this Exhibit to conform this Agreement to subsequent clarifications, revisions, or decisions rendered by the CPUC, CAISO, FERC, or other Governmental Authority having jurisdiction to administer RAR, LAR and FCR, so as to maintain the purpose of the benefits of the bargain struck by the Parties on the Execution Date.

9.2 Seller represents, warrants and covenants to Buyer that, throughout the Delivery Period:

- (a) Seller owns or has the exclusive right to the Replacement RA Capacity sold under this Agreement from each Unit, and shall furnish Buyer, CAISO, CPUC or other jurisdictional LRA, or other Governmental Authority with such evidence as may reasonably be requested to demonstrate such ownership or exclusive right;
- (b) No portion of the Replacement RA Capacity Quantity has been committed by Seller to any third party in order to satisfy RAR, LAR, FCR or such analogous capacity obligations in CAISO markets, other than pursuant to an RMR Agreement between the CAISO and either Seller or the RA Unit's owner or operator;
- (c) No portion of the Replacement RA Capacity Quantity has been committed by Seller in order to satisfy RAR, LAR, FCR, or analogous capacity obligations in any non-CAISO market;
- (d) Each Unit is connected to the CAISO Controlled Grid, is within the CAISO Control Area, or is under the control of CAISO;
- (e) The owner or operator of each Unit is obligated to comply with Applicable Laws, including the CAISO Tariff, relating to RA Capacity and, as applicable, RAR, LAR and/or FCR;
- (f) With respect to the Replacement RA Capacity provided under this Agreement, Seller shall, and each Unit's SC is obligated to, comply with Applicable Laws, including the CAISO Tariff, relating to RA Capacity, and RAR, LAR and FCR;
- (g) Seller has notified the SC of each Unit that Seller has transferred the Replacement RA Capacity to Buyer, and the SC is obligated to deliver the Supply Plans in accordance with the CAISO Tariff;
- (h) Seller has notified the SC of each Unit that Seller is obligated to cause each RA Unit's SC to provide to the Buyer, at least five (5) Business Days before the relevant deadline for each RAR Showing, LAR Showing, and/or FCR Showing, as applicable, the RA Capacity of each Unit that is to be submitted in the Supply Plan associated with the Agreement for the applicable period; and
- (i) Seller has notified each Unit's SC that Buyer is entitled to the revenues set forth in Section 7 of this Exhibit N, and such SC is obligated to promptly deliver those revenues to Buyer, along with appropriate documentation supporting the amount of those revenues

10. Additional Definitions:

“Effective Flexible Capacity” means the flexible capacity of a resource that can be counted towards an LSE’s FCR obligation, as identified from time to time by the CAISO Tariff, the CPUC Decisions, LRA, or other Governmental Authority having jurisdiction.

“FCR Attributes” means, with respect to a Unit, any and all flexible resource adequacy attributes that can be counted toward an LSE’s FCR, as they are identified from time to time by the CPUC Decisions, the Tariff, LRA, or other Governmental Body having jurisdiction, exclusive of any LAR Attributes and any RAR Attributes.

“FCR Showing” means the FCR compliance showings (or similar or successor showings) an LSE is required to make to the CPUC (and, to the extent authorized by the CPUC, to the CAISO) pursuant to the CPUC Decisions, or to an LRA of competent jurisdiction over the LSE.

“Flexible Capacity Requirements” or “FCR” means the flexible capacity requirements established for LSEs by the CPUC pursuant to the CPUC Decisions, a LRA, or by any other Governmental Body of competent jurisdiction.

“Flexible RA Product” means Designated RA Capacity consisting of FCR Attributes, and, if applicable, LAR Attributes and/or RAR Attributes.

“Generic RA Product” means Designated RA Capacity consisting of RAR Attributes and, if applicable, LAR Attributes, but not FCR Attributes.

“LAR” means local area reliability, which is any program of localized resource adequacy requirements established for jurisdictional LSEs by the CPUC pursuant to the CPUC Decisions, or by another LRA of competent jurisdiction over the LSE. LAR may also be known as local resource adequacy, local RAR, or local capacity requirement in other regulatory proceedings or legislative actions.

“LAR Attributes” means, with respect to a Unit, any and all local resource adequacy attributes (or other locational attributes related to system reliability), as they are identified as of the Confirmation Effective Date by the CPUC, CAISO, LRA, or other Governmental Body of competent jurisdiction, associated with the physical location or point of electrical interconnection of such Unit within the CAISO Control Area, that can be counted toward LAR, exclusive of any RAR Attributes and FCR Attributes. For avoidance of doubt, if the CAISO, LRA, or other Governmental Body, defines new or re-defines existing local areas, then such change will not result in a change in payments made pursuant to this Transaction.

“LAR Showings” means the LAR compliance showings (or similar or successor showings) an LSE is required to make to the CPUC (and, to the extent authorized by the CPUC, to the CAISO) pursuant to the CPUC Decisions, or to an LRA of competent jurisdiction over the LSE.

“LRA” means Local Regulatory Authority as defined in the Tariff.

“LSE” means Load Serving Entity.

“Notification Deadline” means ten (10) Business Days before the earlier of the following relevant deadlines for each Showing Month (a) the corresponding RAR Showings, FCR Showings, and/or LAR Showings for such Showing Month, and (b) the CAISO Supply Plan filings applicable to that Showing Month.

“RAR” means the resource adequacy requirements (other than Local RAR or Flexible RAR) established for LSEs by the CPUC pursuant to the CPUC Decisions, or by any other Governmental Body of competent jurisdiction.

“RAR Attributes” means, with respect to a Unit, any and all resource adequacy attributes, as they are identified as of the Confirmation Effective Date by the CPUC, CAISO or other Governmental Body of competent jurisdiction that can be counted toward RAR, exclusive of any LAR Attributes and FCR Attributes.

“RAR Showings” means the RAR compliance showings (or similar or successor showings) an LSE is required to make to the CPUC (and/or, to the extent authorized by the CPUC, to the CAISO), pursuant to the CPUC Decisions, or to an LRA of competent jurisdiction.

“Showing Month” means the calendar month during the Delivery Period that is the subject of the RAR Showing, LAR Showing, and/or FCR Showing, as applicable, as set forth in the CPUC Decisions or Tariff. For illustrative purposes only, the monthly RAR Showing made in June is for the Showing Month of August.

“Supply Plan” means the supply plan, or similar or successor filing, that a Scheduling Coordinator representing RA Capacity submits to the CAISO, LRA, or other applicable Governmental Body pursuant to Applicable Laws in order for that RA Capacity to count as RAR Attributes, LAR Attributes, and/or FCR Attributes, as applicable.

“Unit” or “Units” shall mean the generation assets described in Article 2 hereof (including any Replacement Units), from which RA Capacity is provided by Seller to Buyer.

## EXHIBIT O

### Community Benefits Commitments

1. **Community Benefits Manager.** \_\_\_\_\_ shall serve as the manager of Seller's community benefits commitments ("Manager") and provide fiduciary oversight. The Manager shall ensure that the community benefits commitments listed in the community benefits table below are delivered to the communities that they are intended to benefit in a transparent and accountable manner. The Manager shall work with Buyer's Community Benefits Coordinator, to organize, plan, track, measure, and report on Seller's community benefits commitments. The Manager shall coordinate the senior management of Seller's subconsultants to ensure the entire team participates in providing benefits to the community benefits set forth in this Agreement.

2. **Performance.**

(a) Following the Execution of this Agreement, Seller commits to providing the Community Benefits Commitments detailed below during the Term of the Agreement. Seller's commitments shall be funded independently by Seller and shall not be tied to or dependent upon Buyer's funds or sources of funding, or receivables from Buyer. The representations, warranties and other terms contained in this Exhibit K have been designed by Seller as the basis for a Community Benefit Plan, but are for the sole benefit of the Parties hereto and shall not be construed as conferring any rights on any other persons or entities.

(b) Community Benefits are a deliverable, zero-dollar task. No hours or dollars should be allotted or included in Seller's costs for this Project in order to perform or deliver the voluntarily proposed Community Benefits Commitments. If Sellers commits any funds to delivering the Community Benefits Commitments it proposes, all such funds must be independent of Buyer funding or any dollars associated with this Agreement. If Buyer commits to contributing any funds to performing or delivering its commitments related to this task, such funds may not be dependent in any way upon receipt of Buyer payments under this Agreement.

(c) Seller's Community Benefits Commitments shall be performed prospectively during the Term of the Agreement. Commitments performed as part of previous contracts or prior to the award of this Agreement to Seller cannot be used as part of Seller's Community Benefits Commitments for this Agreement. If Seller has established programs or plans that are consistent with the Community Benefits areas described in the Request for Offers for this Agreement, Seller may continue those programs as part of its community benefits commitments and will be given credit for activities that are performed after the contract is awarded by Buyer.

3. **Deliverables**

(a) Seller shall meet with the SFPUC Assistant General Manager for External Affairs and External Affairs Community Benefits and Social Responsibility Manager to develop a Community Benefits Plan and Timeline within three (3) months of Execution Date. The Community Benefits Plan and Timeline will provide details regarding expenditures, a schedule, and timelines related to the Community Benefits Commitments outlined in the Community Benefits Table.

(b) Seller shall meet once a year with the External Affairs Community Benefits and Social Responsibility Manager during the implementation of the Community Benefits Plan to discuss the work plan and associated timelines, and make any adjustments or updates regarding timing, expenditure of funds, partners, strategic delivery, scale, and performance necessary to ensure the commitments are aligned with and driven by Buyer's priorities and SFPUC's community benefits strategy to ensure we maximize the collective resources and positive impact.

4. **Community Benefits Commitments.** Seller will deliver the proposed Community Benefits Commitments in the community benefits table which provides a description of the community benefit activity, expected outcomes, the timetable and duration of the commitments, the dollar amount of direct contributions, the number and cost of volunteer hours, and trainee hours that will be committed to each specific initiative, as well as for the total value of the Community Benefits Commitments. **[INSERT DESCRIPTION OF COMMITMENTS]** Any changes that occur to the Community Benefits Commitments must be approved by the Community Benefits and Social Responsibility Manager.

**Community Benefits Summary Table**

	(A)	(B)	(C)	(D)	(E)
<b>Community Benefit Category</b>	<b>Direct Financial Contribution</b>	<b>Volunteer Hours</b>	<b>Volunteer Hourly Rate (rate is standardized)</b>	<b>Value of Volunteer Hours (B x C)</b>	<b>Total Contributions (A + D + E)</b>
<b>TOTAL</b>					

5. **Reporting Requirements:**

(a) Seller shall provide detailed descriptions of accountability methods and measures that will be implemented to ensure that the proposed Community Benefits Commitments will be delivered to the communities they are intended to benefit in a transparent and accountable manner. To maximize transparency and accountability, a process or mechanism must be proposed that will assist Buyer in independently verifying that such funds and resources were actually delivered to the intended beneficiaries.

(b) During the implementation of the Community Benefits Commitments, Seller shall submit progress reports to the SFPUC External Affairs Community Benefits and Social Responsibility Manager, which should detail factors such as total number of hours, dollars, etc. contributed to-date. Reports are submitted on the last business day of the month following the close of the 2<sup>nd</sup> and 4<sup>th</sup> quarter. As part of the progress reports, Seller will also submit documents to substantiate that the Community Benefits Commitments were in fact delivered to the communities they were intended to benefit.

(c) Seller shall also submit an annual report and newsletter to the SFPUC External Affairs Community Benefits and Social Responsibility Manager documenting the Community Benefit Commitments, beneficiaries, and outcomes for the year.

6. **Seller Acknowledgement.** Seller acknowledges that it agrees with the following statements:

(a) Any of the Community Benefits Commitments should directly benefit the communities, neighborhoods, and/or residents identified in the Community Benefits Commitments Proposal attached hereto as Attachment 1.

(b) Commitments must support nonprofit and charitable activities.

(c) Commitments shall not go to, nor benefit any SFPUC employee or entities associated with the SFPUC.

(d) Commitments must be delivered at zero cost to the SFPUC.

- (e) Commitments are separate from and in addition to any regulatory or legal requirements related to the contract.
- (f) Commitments are considered binding once they are included in the final agreement.
- (g) Activities related to the commitments can only commence once there is a Notice to Proceed (NTP) associated with this project.
- (h) Contractor commits to complying with SFPUC's reporting requirements.
- (i) Seller shall provide all of the Commitments, consistent with all of the terms of Seller's Community Benefits Commitments Proposal which are not explicitly set forth in this Exhibit K. If there are any conflicts or discrepancies between this Agreement and the attached Proposal, the terms of this Agreement shall prevail.

**Power Purchase and Sale Agreement**  
**For**  
**CleanPowerSF Community Choice Aggregation**  
**by and between**  
**The Buyer and County of San Francisco, acting by and through its**  
**Public Utilities Commission, CleanPowerSF**  
**And**



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## **EXHIBITS**

The follows Exhibits constitute a part of this Agreement and are incorporated into the Agreement by reference.

- EXHIBIT A**      **CONTRACT QUANTITIES**
  - EXHIBIT A-1** MONTHLY ENERGY QUANTITIES
  - EXHIBIT A-2** WEEKDAY HOURLY QUANTITIES
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  - EXHIBIT A-5** GENERATING RESOURCES
  
- EXHIBIT B**      **CARBON CONTENT STANDARD**
  
- EXHIBIT C**      **CONTRACT PRICE**
  
- EXHIBIT D**      **FIRM RA CAPACITY REQUIREMENTS**
  
- EXHIBIT E**      **INSURANCE**
  
- EXHIBIT F-1**    **FORM OF LETTER OF CREDIT**
  
- EXHIBIT F-2**    **SIGHT DRAFT**

**POWER PURCHASE AND SALE AGREEMENT**

**COVER SHEET**

This Renewable Power Purchase Agreement ("Agreement") is entered into between the City and County of San Francisco, acting by and through its Public Utilities Commission, CleanPowerSF ("Buyer") and [insert name of Seller], a \_\_\_\_\_ [include place of formation and business type] ("Seller"), as of \_\_\_\_\_ ("Execution Date"). The Agreement shall include the exhibits, attachments, and any written supplements hereto, any designated collateral, credit support, or similar arrangement between the Parties.

**A. Transaction**

Product:

Contract Price:

Contract Quantity:

Delivery Point:

Delivery Term:

**B. Collateral**

Seller's Collateral Requirement: \$ \_\_\_\_\_

- Cash,
- Letter of Credit, or
- Guaranty.

Buyer's Collateral Requirement: \$ \_\_\_\_\_

- Cash,
- Letter of Credit, or
- Guaranty.

**D. Notices**

<p><b>City and County of San Francisco, acting by and through its Public Utilities Commission, CleanPowerSF (Buyer)</b></p>	<p><b>Seller:</b></p>
<p><b>All Notices:</b>          525 Golden Gate Ave, 7th Floor          San Francisco, CA, 94102          Attn: Contract Administration          Phone: 415-554-4603          Facsimile: 415-554-3225</p>	<p><b>All Notices:</b></p>
<p><b>Federal Tax ID Number: 946000417</b></p>	<p><b>Federal Tax ID Number:          DUNS Number:</b></p>
<p><b>Invoices:</b>          Attn:          Phone:          Facsimile:</p>	<p><b>Invoices:</b>          Attn:          Phone:          Facsimile:</p>
<p><b>Scheduling:</b>          Attn:          Phone:          Facsimile:          Email:          Scheduling Desk: <a href="mailto:PowerScheduler@sfwater.org">PowerScheduler@sfwater.org</a></p>	<p><b>Scheduling:</b>          Attn:          Phone:          Facsimile:          Email:</p>
<p><b>Payments:</b>          Attn:          Phone:          Facsimile:</p>	<p><b>Payments:</b>          Attn:          Phone:          Facsimile:</p>
<p><b>Wire Transfer:</b>          BNK:          ABA (ACH):          ACCT:</p>	<p><b>Wire Transfer:</b>          BNK:          ABA:          ACCT:</p>
<p><b>Credit and Collections:</b>          Attn:          Phone:          Facsimile:</p> <p><b>With additional Notices of an Event of Default or Potential Event of Default to:</b></p>	<p><b>Credit and Collections:</b>          Attn:          Phone:          Facsimile:</p> <p><b>With additional Notices of an Event of Default or Potential Event of Default to:</b></p>

## ARTICLE 1: DEFINITIONS

**AC:** Means alternating current.

**Affiliate:** Means, with respect to any person, any other person (other than an individual) that, directly or indirectly, through one or more intermediaries, controls, or is controlled by, or is under common control with, such person. For this purpose, "control" means the direct or indirect ownership of fifty percent (50%) or more of the outstanding capital stock or other equity interests having ordinary voting power.

**Agreement:** Has the meaning set forth in the Cover Sheet.

**Agreement Term:** Has the meaning set forth in Section 2.2.

**Applicable Law:** Means any statute, law, treaty, rule, tariff, regulation, ordinance, code, permit, enactment, injunction, order, writ, decision, authorization, judgment, decree or other legal or regulatory determination or restriction by a court or governmental authority of competent jurisdiction including the CAISO ("Governmental Authority"), or any binding interpretation of the foregoing, as any of them is amended or supplemented from time to time, that apply to either or both of the Parties or the terms of the Agreement.

**Availability Standards:** The program set forth in Section 40.9 of the CAISO Tariff, as it may be amended, supplemented or replaced (in whole or in part) from time to time, setting forth certain standards regarding the desired level of availability for Resource Adequacy resources and possible charges and incentive payments for performance thereunder.

**Bankrupt:** Means with respect to any entity, such entity (i) files a petition or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause of action under any bankruptcy, insolvency, reorganization or similar law, or has any such petition filed or commenced against it, (ii) makes an assignment or any general arrangement for the benefit of creditors, (iii) otherwise becomes bankrupt or insolvent (however evidenced), (iv) has a liquidator, administrator, receiver, trustee, conservator or similar official appointed with respect to it or any substantial portion of its property or assets, or (v) is generally unable to pay its debts as they fall due.

**Board of Supervisors:** Means the Board of Supervisors for the City and County of San Francisco.

**Business Day:** Means any day except a Saturday, Sunday, a Federal Reserve Bank holiday, or a City and County of San Francisco holiday. A Business Day shall open at 8:00 a.m. and close at 5:00 p.m. local time for the relevant Party's principal place of business. The relevant Party, in each instance unless otherwise specified, shall be the Party from whom the notice, payment or delivery is being sent and by whom the notice or payment or delivery is to be received.

**Buyer:** Means the City and County of San Francisco, acting by and through its Public Utilities Commission, CleanPowerSF.

**Buyer's Collateral Posting:** Has the meaning set forth in Section 5.3(a).

**Buyer's Collateral Requirement:** Has the meaning set forth in Section 5.3(a).

**Buyer's Obligations:** Means the payment obligations of the Buyer under this Agreement and any Transactions entered into pursuant to this Master Agreement.

**CAISO:** Means the California Independent System Operator Corporation or its functional successor.

**CAISO Energy:** Means Energy delivered to Buyer under this Agreement without Ancillary Services (as defined the CAISO Tariff) that will be scheduled as inter-SC trade pursuant to the CAISO Tariff for which the only excuse for failure to deliver or receive is an “Uncontrollable Force” as defined in the CAISO Tariff.

**CAISO Tariff:** Means the California Independent System Operator Corporation, Fifth Replacement Federal ERC Electric Tariff as it may be amended, supplemented or replaced (in whole or in part) from time to time.

**Capacity Attributes:** means any current or future defined characteristic (including the ability to generate at a given capacity level, provide Ancillary Services, and ramp up or ramp down at a given rate), certificate, tag, credit, flexibility, or dispatchability attribute, whether general in nature or specific as to the location or any other attribute of the Facility, intended to value any aspect of the capacity of the Facility to produce energy, including any accounting construct, or any other measure by the CPUC, the CAISO, the FERC, or any other Governmental Authority, to require Buyer to procure, or to procure at Buyer’s expense, Resource Adequacy or other such attribute.

**Carbon Content Standard:** Has the meaning set forth in Exhibit B.

**CARB:** Means the California Air Resources Board or any successor agency.

**CEC:** Means the California Energy Commission or any successor agency.

**Change in Law:** Has the meaning set forth in Section 12.5(f).

**CleanPowerSF:** Means the Buyer’s Community Choice Aggregation Program.

**Compliance Cost Cap:** Has the meaning set forth in Section 3.7(a).

**Compliance Costs:** Has the meaning set forth in Section 3.7.

**Confidential Information:** Has the meaning set forth in Section 12.2(b).

**Contract Price:** Means the price in United States dollars to be paid by Buyer to Seller for the purchase of the Product as set forth in Exhibit C.

**Contract Quantities:** Means the quantities of Product set forth in Exhibit A.

**Contract Year:** A period of twelve (12) consecutive months, commencing at 12:00 a.m. on the Delivery Start Date, and each subsequent Contract Year commencing on the twelve (12) month anniversary of the Delivery Start Date.

**Controller:** Means the Controller for the City and County of San Francisco.

**Costs:** Means, with respect to the Non-Defaulting Party, (a) brokerage fees, commissions and other similar third party transaction costs and expenses reasonably incurred by such Party either in terminating any arrangement or entering into new arrangements which replace this Agreement; and (b) all reasonable attorneys’ fees and expenses incurred by the Non-Defaulting Party in connection with the termination of this Agreement.

**CPUC:** Means the California Public Utilities Commission or any successor government agency.

**Credit Rating;** Means, with respect to any entity, the rating then assigned to such entity's unsecured, senior long-term debt obligations (not supported by third party credit enhancements) or if such entity does not have a rating for its senior unsecured long-term debt, then the rating then assigned to such entity as an issuer rating by S&P and/or Moody's.

**Defaulting Party;** Has the meaning set forth in Section 9.1.

**Delivery Term;** Has the meaning set forth in Section 2.2.

**Delivery Point;** Means \_\_\_\_\_.

**Downgrade Event;** Means a Party's credit rating falls below BBB- from S&P or Baa3 from Moody's.

**Early Termination Date;** Has the meaning set forth in Section 9.2(a).

**Effective Date;** Has the meaning set forth in Section 2.1(d).

**Eligible LC Bank;** Means a U.S. commercial bank or a foreign bank with a U.S. branch, that has a credit rating of at least A3 from Moody's or A- from S&P.

**Eligible Renewable Resource or ERR;** Means an Eligible Renewable Energy Resource as such term is defined in California Public Utilities Code Section 399.12 or Section 399.16 and California Public Resources Code Section 25741, as these provisions may be amended or supplemented from time to time.

**Energy;** Means three-phase, 60-cycle alternating current electric energy measured in MWh.

**Environmental Attributes;** Means any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the generation from a facility and its avoided emission of pollutants. Environmental Attributes include but are not limited to Renewable Energy Credits, as well as:

- (1) any avoided emission of pollutants to the air, soil or water such as sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO) and other pollutants;
- (2) any avoided emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change, or otherwise by law, to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere;
- (3) the reporting rights to these avoided emissions, such as Green Tag Reporting Rights. Green Tag Reporting Rights are the right of a Green Tag Purchaser to report the ownership of accumulated Green Tags in compliance with federal or state law, if applicable, and to a federal or state agency or any other party at the Green Tag Purchaser's discretion, and include without limitation those Green Tag Reporting Rights accruing under Section 1605(b) of The Energy Policy Act of 1992 and any present or future federal, state, or local law, regulation or bill, and international or foreign emissions trading program. Green Tags are accumulated on a MWh basis and one Green Tag represents the Environmental Attributes associated with one (1) MWh of Energy.

Environmental Attributes do not include:

- (i) any energy, capacity, reliability or other power attributes from a project,



- (ii) production tax credits associated with the construction or operation of a project and other financial incentives in the form of credits, reductions, or allowances associated with the project that are applicable to a state or federal income taxation obligation,
- (iii) fuel-related subsidies or “tipping fees” that may be paid to Seller to accept certain fuels, or local subsidies received by the generator for the destruction of particular preexisting pollutants or the promotion of local environmental benefits, or
- (iv) emission reduction credits encumbered or used by a project for compliance with local, state, or federal operating and/or air quality permits. If a project is a biomass or biogas facility and Seller receives any tradable Environmental Attributes based on the greenhouse gas reduction benefits or other emission offsets attributed to its fuel usage, it shall provide Buyer with sufficient Environmental Attributes to ensure that there are zero net emissions associated with the production of electricity from a project.

**Equitable Defenses:** Means any bankruptcy, insolvency, reorganization and other laws affecting creditors’ rights generally, and with regard to equitable remedies, the discretion of the court before which proceedings to obtain same may be pending.

**Event of Default:** Has the meaning set forth in Section 9.1.

**Execution Date:** Has the meaning set forth on the Cover Sheet.

**FERC:** Means the Federal Energy Regulatory Commission or any successor agency.

**Firm RA Capacity:** Means Capacity Attributes from the RA Units in the amount of the RA Contract Quantity. If the RA Units are not available to provide the full amount of the RA Contract Quantity for any reason other than Force Majeure, including without limitation any outage or any adjustment of the RA Capacity of any RA Unit, then, Seller shall provide Buyer with Replacement Capacity Attributes pursuant to Exhibit D.

**Force Majeure:** Means an event or circumstance, including a natural disaster, war, riot, or civil disturbance, which prevents one Party (“Claiming Party”) from performing its material obligations under this Agreement, which event or circumstance was not anticipated as of the Execution Date, which is not within the reasonable control of, or the result of the action or inaction of, the Claiming Party, and which, by the exercise of due diligence, the Claiming Party is unable to overcome or avoid or cause to be avoided. Neither Party may raise a claim of Force Majeure based in whole or in part on;

- (a) failures or delays by the participating transmission owner and/or the CAISO in entering into, or performing under, any agreements with Seller contemplated by this Agreement except to the extent that such delay is solely caused by a Force Majeure;
- (b) a strike, work stoppage or labor dispute;
- (c) Seller’s failure to obtain additional funds, including funds authorized by a state or the federal government or agencies thereof, to supplement the payments made by Buyer pursuant to this Agreement;
- (d) a Forced Outage except where such Forced Outage is caused by an event of Force Majeure;
- (e) a Curtailment Order; or

- (f) economic conditions that render a Party's performance of this Agreement at the Contract Price unprofitable or otherwise uneconomic, including Buyer's ability to buy Product at a lower price, or Seller's ability to sell Product at a higher price).

**Gains:** Means, with respect to any Party, an amount, determined in a commercially reasonable manner, equal to the present value of the economic benefit to it, if any (exclusive of Costs), resulting from the termination of this Agreement. Factors used in determining economic benefit may include reference to information either available to the Party internally or supplied by one or more third parties, including quotations (either firm or indicative) of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets, market price referent, market prices for a comparable transaction, forward price curves based on economic analysis of the relevant markets, settlement prices for a comparable transaction at liquid trading hubs (e.g., NYMEX), all of which should be calculated for the remainder of the Term to determine the value of the Product, including the value of Environmental Attributes and Capacity Attributes, as applicable.

**Governmental Authority:** Any federal or state government, or political subdivision thereof, including, without limitation, any municipality, township or county, or any entity or authority exercising executive, legislative, judicial, regulatory or administrative functions of or pertaining to government, including, without limitation, the CAISO or any corporation or other entity owned or controlled by any of the foregoing.

**Guarantor:** Means, with respect to a Party, any Person that (a) is reasonably acceptable to the other Party, (b) has a Credit Rating of A- or better from S&P or a Credit Rating of A3 or better from Moody's, (c) is incorporated or organized in a jurisdiction of the United States and is in good standing in such jurisdiction, and (d) executes and delivers a Guaranty for the benefit of the other Party.

**Guaranty:** Means a guaranty from a Guarantor provided for the benefit of Buyer as reasonably acceptable to Buyer.

**Indemnified Party:** Has the meaning set forth in Section 10.1.

**Indemnifying Party:** Has the meaning set forth in Section 10.1.

**Investment Grade:** Means a Credit Rating of BBB- or better by S&P and Baa3 or better by Moody's.

**Late Payment Penalty:** Has the meaning set forth in Section 4.1(b).

**Letter(s) of Credit:** Means one or more irrevocable, transferable standby letters of credit issued by a U.S. commercial bank or a foreign bank with a U.S. branch, with such bank having a credit rating of at least A3 from Moody's or A- from S&P in a form acceptable to the Party in whose favor the letter of credit is issued. Costs of a Letter of Credit shall be borne by the applicant for such Letter of Credit.

**Losses:** Means, with respect to any Party, an amount, determined in a commercially reasonable manner, equal to the present value of the economic loss to it (exclusive of Costs) resulting from termination of this Agreement. Factors used in determining the loss of economic benefit may include reference to information either available to it internally or supplied by one or more third parties, including quotations (either firm or indicative) of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets, market price referent, market prices for a comparable transaction, forward price curves based on economic analysis of the relevant markets, settlement prices for a comparable transaction at liquid trading hubs (e.g. NYMEX), all of which should be calculated for the remainder of the Term to determine the value of the Product, including Environmental Attributes and Capacity Attributes, as applicable. If the Non-Defaulting Party is the Seller, then in addition to lost payments for Product pursuant

to this Agreement, "Losses" shall exclude any associated loss of investment tax credits and other lost tax benefits.

**Moody's:** Means Moody's Investor Services, Inc. or its successor.

**NERC:** Means the North American Electricity Reliability Council.

**NERC Business Day:** Means any day except a Saturday, Sunday or a holiday as defined by the North American Electric Reliability Council or any successor organization thereto. A NERC Business Day shall open at 8:00 a.m. and close at 5:00 p.m. local time for the relevant Party's principal place of business. The relevant Party, in each instance unless otherwise specified, shall be the Party from whom the notice, payment or delivery is being sent and by whom the notice or payment or delivery is to be received.

**Non-Defaulting Party:** Has the meaning set forth in Section 9.2.

**Performance Assurance:** Means collateral in the form of either cash, Letter(s) of Credit, a Guaranty from an entity with an Investment Grade Credit Rating, or other security acceptable to the requesting party.

**Pledgor:** Has the meaning set forth in Section 5.1.

**Political Activity:** Has the meaning set forth in Section 12.14.

**Portfolio Content Category 1 or PCC1:** Means Renewable Energy products that satisfy the requirements of Section 399.16(b)(1) of the California Public Utilities Code.

**Portfolio Content Category 2 or PCC2:** Means Renewable Energy products that satisfy the requirements of Section 399.16(b)(2) of the California Public Utilities Code.

**Portfolio Content Category 3 or PCC3:** Means Renewable Energy products that satisfy the requirements of Section 399.16(b)(3) of the California Public Utilities Code.

**Potential Event of Default:** Means an event which, with notice or passage of time or both, would constitute an Event of Default.

**Product:** Means \_\_\_\_\_.

**Public Records Laws:** Means the California Public Records Act, California Government Code Sections 6250, et seq., the San Francisco Sunshine Ordinance, San Francisco Administrative Code Chapter 67, the Ralph M. Brown Act, California Government Code Sections 54950, et seq., and any other applicable law regarding public records as may be amended from time to time.

**Renewable Energy:** Means Energy generated from an ERR that is generated in the same calendar year that it is delivered to Buyer.

**Renewable Energy Credits or RECs:** Has the meaning set forth in California Public Utilities Code Section 399.12(h) and CPUC Decision 08-08-028 as may be amended from time to time or as further defined or supplemented by Applicable Law.

**Renewables Portfolio Standard or RPS:** Means the California renewables portfolio standard, as set forth in California Public Utilities Code §§ 399.11 et seq. and California Public Resources Code §§ 25740-25751, as may be modified or supplemented from time to time.

**Replacement Price:** Means the price at which Buyer, acting in a commercially reasonable manner, purchases for delivery at the Delivery Point a replacement for any Product specified in a Transaction but not delivered by Seller, plus (i) costs reasonably incurred by Buyer in purchasing such substitute Product and (ii) additional transmission charges, if any, reasonably incurred by Buyer to the Delivery Point, (provided Buyer shall use reasonable efforts to minimize any such additional transmission charges), or absent a purchase, the market price at the Delivery Point for such Product not delivered as determined by Buyer in a commercially reasonable manner; provided, however, in no event shall such price include any penalties, ratcheted demand or similar charges, nor shall Buyer be required to utilize or change its utilization of its owned or controlled assets or market positions to minimize Seller's liability. For the purposes of this definition, Buyer shall be considered to have purchased replacement Product to the extent Buyer shall have entered into one or more arrangements in a commercially reasonable manner whereby Buyer repurchases its obligation to sell and deliver the Product to another Buyer at the Delivery Point.

**Resource Adequacy Requirements or RAR:** Means the resource adequacy capacity requirements established for load serving entities by the CPUC pursuant to the CPUC Decisions D.04-01-050, 04-10-035 and 05-10-042, 06-04-040, 06-06-064, 06-07-031, 07-06-029, 08-06-031, 09-06-028, 10-06-036, 11-06-022, 12-06-025, 13-06-024, and any other existing or subsequent decisions, resolutions or rulings addressing Resource Adequacy issues, as those obligations may be altered from time to time, the flexible capacity standards under the CAISO Tariff, or by any other Governmental Authority having jurisdiction.

**RA Capacity:** Means the qualifying and deliverable capacity of a designed RA Unit for Resource Adequacy Requirements, Local Resource Adequacy, and Flexible Capacity Requirements as determined by the CAISO, or other Governmental Authority under Applicable Law.

**RA Contract Quantities:** Means the quantities of RA Capacity set forth in Exhibit D that will be delivered to Buyer under this Agreement.

**RA Units:** Means the RA facilities set forth in Exhibit D. **S&P:** Means the Standard & Poor's Financial Services LLC (a subsidiary of the McGraw-Hill Companies, Inc.) or its successor.

**Sales Price:** Means the price at which Seller, acting in a commercially reasonable manner, resells any Product not received by Buyer, deducting from such proceeds any (i) costs reasonably incurred by Seller in reselling such Product and (ii) additional transmission charges, if any, reasonably incurred by Seller in delivering such Product to the third party purchasers, (provided Seller shall use reasonable efforts to minimize any such additional transmission charges), or absent a sale, the market price at the Delivery Point for such Product not received as determined by Seller in a commercially reasonable manner; provided, however, in no event shall such price include any penalties, ratcheted demand or similar charges, nor shall Seller be required to utilize or change its utilization of its owned or controlled assets, including contractual assets, or market positions to minimize Buyer's liability. For purposes of this definition, Seller shall be considered to have resold such Product to the extent Seller shall have entered into one or more arrangements in a commercially reasonable manner whereby Seller repurchases its obligation to purchase and receive the Product from another party at the Delivery Point.

**Schedule or Scheduling:** Means the actions of Seller, Buyer and/or their designated representatives, including each Party's Transmission Providers, if applicable, of notifying, requesting and confirming to each other the quantity and type of Product to be delivered on any given day or days during the Delivery Period at a specified Delivery Point.

**Scheduling Coordinator or SC:** Has the meaning set forth in the CAISO Tariff.

**Secured Party:** Has the meaning set forth in Section 5.3.

**Seller:** Means \_\_\_\_\_.

**Seller's Collateral Posting:** Has the meaning set forth in Section 5.2(a).

**Seller's Collateral Requirement:** Has the meaning set forth in Section 5.2(a).

**SFPUC:** Means the San Francisco Public Utilities Commission or any successor government agency.

**Termination Payment:** Means, with respect to the Non-Defaulting Party, the sum of (a) the Losses or Gains, and Costs which such Party incurs as a result of the termination of this Agreement pursuant to Section 9.3, plus (b) the sum of all amounts then owed to the Non-Defaulting Party by the Defaulting Party determined as of the Early Termination Date.

**WREGIS:** Means the Western Renewable Energy Generation Information System or any successor renewable energy tracking program.

**WREGIS Certificate:** Has the meaning set forth in the WREGIS Operating Rules and are designated as eligible for compliance with the California RPS.

**WREGIS Certificate Deficit:** Means any deficit or shortfall in WREGIS Certificates delivered to Buyer for a calendar month as compared to the delivered Product for the same calendar month, after taking into account applicable delays in the issuance of WREGIS Certificates or otherwise arising under WREGIS Operating Rules.

**WREGIS Operating Rules:** Means those operating rules and requirements adopted by WREGIS as of December 2010, as subsequently amended, supplemented or replaced from time to time.

## ARTICLE 2: CONDITIONS PRECEDENT AND TERM

**2.1 Conditions Precedent.** The Term of this Agreement shall not commence until the occurrence of all of the following:

- (a) For Each Party: Each Party has received Collateral Assurance from the other Party as required under Article 5.
- (b) For Seller: A copy of each of:
  - (i) the articles of incorporation, certificate of incorporation, operating agreement or similar applicable organizational document of Seller,
  - (ii) the by-laws or other similar document of Seller (collectively, "Charter Documents") as in effect, or anticipated to be in effect, on the Execution Date,
  - (iii) A certificate from the jurisdiction of Seller's incorporation or organization certifying that Seller is duly organized, validly existing and in good standing under the laws of such jurisdiction, and
  - (iv) Evidence of insurance as set forth in Exhibit XX.
- (c) For Buyer:

- (i) This Agreement has been approved, if required, by the San Francisco Public Utilities Commission and/or San Francisco Board of Supervisors; and
  - (ii) The Controller has certified in accordance with the City Charter that sufficient unencumbered balances are available in the proper fund.
- (d) Effective Date. The Effective Date of this Agreement shall be the date that all of the Conditions Precedent set forth above have been satisfied or waived in writing by both Parties.
- (e) Failure to meet all Conditions Precedent. If the Conditions Precedent set forth in this Section are not satisfied or waived in writing by both Parties within ninety (90) days of full execution of this Agreement, then either Party may terminate this Agreement effective upon receipt of notice by the other Party. Neither Party shall have any obligation or liability to the other, including for a Termination Payment or otherwise, as a result of such termination.

## 2.2 Agreement Term and Delivery Term.

- (a) Agreement Term. The term of this Agreement shall commence and this Agreement shall be effective upon the Effective Date, unless earlier terminated pursuant to an express provision of this Agreement, and shall remain in effect until the delivery to Buyer of all of the Environmental Attributes under this Agreement (the "Term").
- (b) Delivery Term. The Delivery Term shall commence from and including Hour Ending ("HE") 0100 on XXXXXX and continue through and including HE 2400 on XXXXX ("Delivery Term") unless terminated pursuant to Section 9 of this Agreement.

## ARTICLE 3: PURCHASE AND SALE

### 3.1 Purchase and Sale of Product.

- (a) Transaction. During the Delivery Term, Seller shall sell and deliver, or cause to be delivered, and Buyer shall purchase and receive, or cause to be received, the Product at the Delivery Point in the Contract Quantities set forth in Exhibit A.
- (b) Title and Risk of Loss. Title to and risk of loss as to all Product purchased by Buyer shall pass from Seller to Buyer at the Delivery Point. Seller shall be responsible for any costs, fees, taxes, assessments, or charges associated with the Product or its delivery of the Product up to the Delivery Point. Buyer shall be responsible for any costs, or charges imposed on or associated with the Product or the delivery of the Product at and from the Delivery Point. Seller warrants that it shall deliver all Product to Buyer free and clear of all liens, security interests, claims and encumbrances or any interest therein or thereto created by any Person other than Buyer.
- (c) Transmission and Scheduling. Seller shall arrange and be responsible for transmission service to the Delivery Point and shall Schedule or arrange for Scheduling services to deliver the Product to the Delivery Point. Buyer shall arrange and be responsible for

transmission service at and from the Delivery Point and shall Schedule or arrange for Scheduling services to receive the Product at the Delivery Point.

**3.2 Contract Price.** Buyer shall pay Seller for Product delivered pursuant to this Agreement as set forth in Exhibit C.

**3.3 Product Sources.**

- (a) CAISO Energy Deliveries. The CAISO Energy provided under this Agreement may be procured from unit-specific resources, provided that such resources are not coal or nuclear. Seller is permitted to supply Energy quantities from the facilities identified in Appendix A-5. Seller may add or remove facilities from Appendix A-5 by providing written notice to Buyer within fifteen days (15) of the addition or removal. The notice shall include an amended Appendix A-5. To the extent unit specific resources have not been agreed to by the Parties, Seller may use system power to provide the required CAISO Energy so long as the Carbon Content Standard is met for the Contract Year.
- (b) Imports. To the extent Seller imports specified sources of Energy into a California balancing authority area (including the CAISO) for purposes of satisfying the Carbon Content Standard, the scheduling of such Energy shall be validated by NERC e-Tag, which shows the Energy is scheduled into a California balancing authority area (including the CAISO).
- (c) Renewable Energy. Seller shall supply Renewable Energy quantities delivered under this Agreement from the facilities identified in Appendix A-5. Seller may add or remove facilities from Appendix A-5 by providing written notice to Buyer within fifteen days (15) of the addition or removal. The notice shall include an amended Appendix A-5.
- (d) PCC 2. Incremental Energy deliveries for PCC 2 Energy shall not be sourced from coal or nuclear resources.
- (e) Carbon Content Standard. The carbon content for the Product shall not exceed the values set forth in Exhibit B as calculated in accordance with the Carbon Content Methodology.

**OR**

Additional Carbon Free Energy. Seller shall supply the Additional Carbon Free Energy quantities set forth in Appendix A-5 in accordance with Exhibit B.

**3.4 Environmental Attributes.**

- (a) Purchase and Sale of Environmental Attributes. During the Delivery Term, Seller shall sell and transfer to Buyer, and Buyer shall purchase and receive from Seller, all right, title and interest in and to the Environmental Attributes associated with the Energy delivered under this Agreement, whether now existing or subsequently created by a Governmental Authority after the Execution Date during the Agreement Term. Seller shall, at its sole expense, take all actions and execute all documents or instruments necessary to transfer all rights, title, and interest in and to the Environmental Attributes, whether now existing or that come into existence in the future, associated with the Energy delivered to Buyer under this Agreement. Seller shall transfer and make such Environmental Attributes available to Buyer as soon as practicable upon Seller's production of the Environmental Attributes.

- (b) Buyer's Right to Report Ownership of Environmental Attributes. Seller shall not report to any Person or entity that the Environmental Attributes belong to anyone other than Buyer, and Buyer may report under any program that such Environmental Attributes purchased hereunder belong to it.
- (c) Renewable Energy Credits. Seller shall, at its sole expense take all actions and execute all documents or instruments necessary to ensure that all WREGIS Certificates associated with all Renewable Energy Credits corresponding to all Delivered Energy are issued and tracked for purposes of satisfying the applicable requirements of the California RPS and transferred within three (3) months of creation to Buyer for Buyer's sole benefit. Seller shall comply with all Applicable Laws, including, without limitation, the WREGIS Operating Rules, regarding the certification and transfer of such WREGIS Certificates to Buyer.
- (i) Seller shall cause REC transfers to occur on a monthly basis in accordance with the certification procedure established by the WREGIS Operating Rules. Any fractional MWh amounts (i.e., kWh) shall be carried forward until sufficient generation is accumulated for the creation of a WREGIS Certificate.
- (ii) Due to the delay in the creation of WREGIS Certificates relative to the timing of the monthly invoice payment under this Agreement, Buyer may make an invoice payment for a given month before the WREGIS Certificates for such month are formally transferred to Buyer in accordance with the WREGIS Operating Rules. Notwithstanding this delay, Buyer shall have all right and title to all such WREGIS Certificates upon payment to Seller.
- (iii) Seller shall, at its sole expense, ensure that the WREGIS Certificates for a given calendar month correspond with the Delivered Energy for such calendar month. If any WREGIS Certificate Deficit is caused by, or the result of any action or inaction, by Seller, then the amount of Delivered Energy in such calendar Month ("the Deficient Month") shall be reduced by the amount of the WREGIS Certificate Deficit for the purposes of calculating Buyer's payment(s) to Seller under Article 4. Any amount owed by Seller to Buyer because of a WREGIS Certificate Deficit shall be made as an adjustment to Seller's next monthly invoice to Buyer in accordance with Article 4, and Buyer shall net such amount against Buyer's subsequent payment(s) to Seller.
- (iv) Without limiting Seller's obligations, to the extent a WREGIS Certificate Deficit is caused by an error or omission of WREGIS, the Parties shall cooperate in good faith to cause WREGIS to correct its error or omission.
- (v) If WREGIS changes the WREGIS Operating Rules after the Execution Date or applies the WREGIS Operating Rules in a manner inconsistent with this Agreement, the Parties promptly shall modify this Agreement as reasonably required (i) to cause and enable Seller to transfer to Buyer's WREGIS Account a quantity of WREGIS Certificates for each given calendar month that corresponds to the Delivered Energy in the same calendar month or (ii) as may otherwise be reasonably appropriate to address such inconsistency.

### 3.5 Firm RA Capacity.



Capacity Attributes. During the Delivery Term, Seller shall provide to Buyer, pursuant to the terms of Exhibit D, the RA Capacity Quantities of Firm RA Capacity, including LAR Attributes, and FCR Attributes from the RA Units. The delivery of Firm RA Capacity pursuant to this Agreement does not confer on Buyer any right to the electrical output from the RA Unit, other than than the right to include the Firm RA Capacity in RAR, LAR, and FCR Showings, as applicable, and any other capacity or RA market proceedings. Specifically, Seller shall not be required to make available to Buyer any energy or ancillary services associated with any RA Unit as part of this Agreement, and Buyer shall not be responsible for compensating Seller for Seller's commitments to the CAISO required by this Agreement. Seller retains the right to sell any Capacity Attributes from a RA Unit that is in excess of the RA Contract Quantities.

**3.6 Compliance Cost Cap.** If Seller establishes to Buyer's reasonable satisfaction that change in Applicable Law has occurred after the Effective Date that results in Compliance Costs as defined in Section 3.8(a), then Seller's Compliance Costs during the Delivery Term shall be capped annually at the greater of \_\_\_\_\_ per MW or \_\_\_ percent of annual expected revenue from this Agreement ("Compliance Cost Cap").

- (a) Compliance Costs. This Section shall apply to Seller's additional, reasonable out-of-pocket costs paid to third parties for obtaining, maintaining, conveying, or complying with: (i) CEC Certification, (ii) Environmental Attributes including WREGIS certificates, and (iii) Capacity Attributes ("Compliance Costs"). Compliance Costs include only those new costs associated with the change in Applicable Law after the Execution Date that are in excess of the reasonably anticipated compliance costs as of the Execution Date.
- (b) Compliance Cost-Cap. In the event that the Compliance Costs exceed the Compliance Cost Cap, Buyer shall either reimburse Seller for such Compliance Costs that exceed the Compliance Cost Cap, or excuse Seller from performing those obligations that cause the Compliance Costs to exceed the Compliance Cost Cap.
- (c) Notice. Seller shall notify Buyer within sixty (60) calendar days after the applicable Change in Law if it anticipates that its Compliance Costs will exceed the Compliance Cost Cap and provide Buyer with an estimate of the Compliance Costs. Buyer shall notify Seller within thirty (30) calendar days of receipt of the notice whether Buyer (i) agrees to reimburse Seller for the additional costs, or (ii) waive Seller's performance of such obligations.

**3.7 Compliance Reporting.** Upon the request of the other Party, each Party shall provide all information reasonably necessary for the other Party to timely comply with compliance reporting requirements to the appropriate Governmental Entities, and as otherwise required by Applicable Law with respect to any Product.

## | ARTICLE 4: BILLING AND PAYMENT |

### **4.1 Billing and Payment.**

- (a) Monthly Invoices. No sooner than ten (10) days after the end of each calendar month, Seller shall provide to Buyer an invoice for the Product delivered in the prior month based on \_\_\_\_\_. The invoice shall include:
- (b) Payment. All invoices shall be due and payable on or before the forty-fifth (45th) day after receipt of the invoice or, if such day is not a Business Day, then on the next Business Day

("Due Date"). Any amount not paid by the Due Date shall be subject to a late payment penalty equal to a daily rate of \$5.50 per \$100,000 ("Late Payment Penalty") for a maximum period of ninety (90) calendar days after such payment is due.

- (c) City Vendor Requirements. Notwithstanding any other provision of this Agreement, Buyer shall not be deemed to be in default of this Agreement and no Late Payment Penalty shall be assessed if an invoice under this Agreement cannot be processed by Buyer due to Seller's failure to comply with all applicable Buyer requirements for Buyer's contractors, including but not limited to, certification of vendors under Chapter 12 of the San Francisco Administrative Code, payment of business license fees or taxes, or any other current or future Buyer requirement for vendor payment processing. Seller understands and acknowledges that vendor certifications may include annual renewals and additional certification requirements may apply to assignees or changes in ownership or control of Seller.
- (d) Disputes and Adjustments of Invoices. A Party may, in good faith, dispute the correctness of any invoice or any adjustment to an invoice, rendered under this Agreement or adjust any invoice for any arithmetic or computational error within twelve (12) months of the date the invoice, or adjustment to an invoice, was rendered. In the event an invoice or portion thereof, or any other claim or adjustment arising hereunder, is disputed, payment of the undisputed portion of the invoice shall be required to be made when due, with notice of the objection given to the other Party. Any invoice dispute or invoice adjustment shall be in writing and shall state the basis for the dispute or adjustment. Payment of the disputed amount shall not be required until the dispute is resolved. Upon resolution of the dispute, any required payment shall be made within five (5) Business Days of such resolution along with the Late Payment Penalty from and including the due date to but excluding the date paid. Inadvertent overpayments shall be returned upon request or deducted by the Party receiving such overpayment from subsequent payments, with the Late Payment Penalty from and including the date of such overpayment to but excluding the date repaid or deducted by the Party receiving such overpayment. Any dispute with respect to an invoice is waived unless the other Party is notified in accordance with this Section 4.1 within twelve (12) months after the invoice is rendered or any specific adjustment to the invoice is made. If an invoice is not rendered within twelve (12) months after the close of the month during which performance of a Transaction occurred, the right to payment for such performance is waived.
- (e) CAISO Adjustments. If the CAISO makes any adjustment to any CAISO meter data for a given time period, Seller agrees that it shall submit revised monthly invoices, pursuant to Section 4.1, covering the entire applicable time period in order to conform fully such adjustments to the meter data. Seller shall submit any such revised invoice no later than thirty (30) days from the date on which the CAISO provides to Seller such binding adjustment to the meter data.

#### **4.2 Designated Fund**

- (a) Auto-Appropriating Designated Fund. The Buyer's Obligations under this Agreement shall be paid from a SFPUC designated fund that will automatically appropriate CleanPowerSF revenues on an annual basis without further Buyer action and which shall be used solely for CleanPowerSF costs and expenses, including the Buyer's Obligations. Buyer agrees to set CleanPowerSF rates and charges that are sufficient to maintain revenues necessary to pay the Buyer Obligations and all of Buyer's payment obligations

under its other contracts for the purchase of energy for CleanPowerSF. Buyer shall provide Seller with reasonable access to account balance information with respect to the SFPUC designated fund at all times during the Delivery Period of a Transaction.

- (b) Limited Obligations. The Buyer's Obligations are special limited obligations of Buyer payable solely from the revenues of CleanPowerSF. The Obligations are not a charge upon the revenues or general fund of the SFPUC or the Buyer or upon any nonCleanPowerSF moneys or other property of the SFPUC or the Buyer.

#### **4.3 Guaranteed Maximum Cost.**

- (a) Controller Certification. The Buyer's Obligations hereunder shall not at any time exceed the amount certified by the Controller for the purpose and period stated in such certification. Except as may be provided by laws governing emergency procedures, officers and employees of the Buyer are not authorized to request, and the Buyer is not required to reimburse Seller for, commodities or services beyond the agreed upon contract scope unless the changed scope is authorized by amendment and approved as required by law. Officers and employees of the Buyer are not authorized to offer or promise, nor is the Buyer required to honor, any offered or promised additional funding in excess of the maximum amount of funding for which the contract is certified without certification of the additional amount by the Controller. The Controller is not authorized to make payments on any contract for which funds have not been certified as available in the budget or by supplemental appropriation.
- (b) Biannual Budget Process. For each City biannual budget cycle during the term of this Agreement, Buyer agrees to take all necessary action to include the maximum amount of the Buyer's payment obligations under this Agreement in its budget submitted to the Buyer's Board of Supervisors for that budget cycle.

### **ARTICLE 5: CREDIT AND COLLATERAL REQUIREMENTS**

**5.1 Grant of Security Interest/Remedies.** To secure its obligations under this Agreement, each Party (a "Pledgor") hereby grants to the other Party (the "Secured Party") a present and continuing security interest in, and lien on (and right of setoff against), and assignment of, the Pledgor's Collateral Posting and Performance Assurance posted with the other Party in the form of cash collateral, cash equivalent collateral, or Guaranty and any and all proceeds resulting therefrom or the liquidation thereof, whether now or hereafter held by, on behalf of, or for the benefit of, such Secured Party. Within thirty (30) calendar day of the delivery of the Collateral Posting or Performance Assurance, each Party agrees to take such action as the other Party reasonably requires in order to perfect the Secured Party's first-priority security interest in, and lien on (and right of setoff against), such collateral and any and all proceeds resulting therefrom or from the liquidation thereof. Upon or any time after the occurrence or deemed occurrence and during the continuation of an Event of Default or an Early Termination Date, the Non-Defaulting Party may do any one or more of the following:

- (a) exercise any of the rights and remedies of a Secured Party with respect to all Collateral Posting and Performance Assurance, including any such rights and remedies under law then in effect;
- (b) draw on any outstanding Letter of Credit or Guaranty issued for its benefit, and;

- (c) liquidate any Collateral Posting or Performance Assurance then held by or for the benefit of the Secured Party free from any claim or right of any nature whatsoever of the Defaulting Party, including any equity or right of purchase or redemption by the Defaulting Party.

The Secured Party shall apply the proceeds of the collateral realized upon the exercise of any such rights or remedies to reduce the Pledgor's obligations under the Agreement (the Pledgor remaining liable for any amounts owing to the Secured Party after such application), subject to the Secured Party's obligation to return any surplus proceeds remaining after such obligations are satisfied in full.

**5.2 Buyer Credit Protection. [TO BE NEGOTIATED]**

**5.3 Seller Credit Protection. [TO BE NEGOTIATED]**

**5.4 Letter of Credit.** Development Assurance or Performance Assurance provided in the form of a Letter of Credit shall be substantially in the form set forth in Exhibit XXXX subject to the following provisions:

- (a) Renewal of Letter of Credit. If a Party has provided a Letter of Credit pursuant to any of the applicable provisions in this Article 5, then such Party shall renew or cause the renewal of each outstanding Letter of Credit on a timely basis in accordance with this Agreement.
- (b) Failure of Letter of Credit and Cure. In the event the issuer of such Letter of Credit at any time: fails to maintain the requirements of an Eligible LC Bank or Letter of Credit, becomes Bankrupt, indicates its intent not to renew such Letter of Credit, or fails to honor Buyer's properly documented request to draw on such Letter of Credit, Seller shall cure such occurrence by complying with either (i) or (ii) below in an amount equal to the outstanding Letter of Credit, and by completing the action within five (5) Business Days after the date of Buyer's notice to Seller of an occurrence listed in this subsection (Seller's compliance with either (i) or (ii) below is considered the "Cure"):
  - (i) providing a substitute Letter of Credit that is issued by an Eligible LC Bank other than the bank which is the subject of Buyer's notice to Seller in this section 6.3(b),
  - (ii) providing a Guaranty, or
  - (iii) posting cash.
- (c) Failure to Cure. If Seller fails to cure or if such Letter of Credit expires or terminates without a full draw thereon by Buyer, or fails or ceases to be in full force and effect at any time that such Letter of Credit is required pursuant to the terms of this Agreement, then Seller shall have failed to meet the collateral requirements of Section 5.3 and Buyer may declare an Event of Default as set forth in Article 9.
- (d) Letter of Credit Costs. In all cases, the reasonable costs and expenses of establishing, renewing, substituting, canceling, increasing, reducing, or otherwise administering the Letter of Credit shall be borne by Seller.

**5.5 Guaranty.** If at any time the Pledgor's Guarantor or Guaranty is no longer acceptable to the Secured Party, in its reasonable discretion, the Pledgor shall replace the Guaranty within five (5) Business Days following a written request for replacement of the Guaranty. The Pledgor shall provide for the benefit of the Secured Party either (1) cash, (2) a replacement Guaranty from a different Guarantor meeting the

criteria set forth in the definition of Guarantor, or (3) a replacement Letter of Credit from an issuer meeting the criteria set forth in the definition of Letter of Credit. If Pledgor fails to provide replacement collateral as required in this Section 5.5, then Buyer may declare an Event of Default as set forth in Article 9.

## ARTICLE 6: FINANCIAL STATEMENTS

**6.1 Seller's Obligations.** If requested by Buyer, Seller shall deliver, or make available on its website, (i) within six (6) months following the end of each fiscal year, a copy of Seller's annual report containing audited consolidated financial statements for such fiscal year (or if not available, unaudited consolidated financial statements for such fiscal year), and (ii) within forty-five (45) days after the end of each of its first three (3) fiscal quarters of each fiscal year, a copy of Seller's quarterly report containing unaudited consolidated financial statements for such fiscal quarter. In all cases the statements shall be for the most recent accounting period and prepared in accordance with generally accepted accounting principles and shall be certified by the Chief Financial Officer or equivalent officer of Seller on behalf of Seller; provided, however, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default so long as Seller diligently pursues the preparation, certification and delivery of the statements.

**6.2 Buyer's Obligations.** If requested by Seller, Buyer shall deliver to Seller (i) within six (6) months following the end of each fiscal year, a copy of Buyer's annual report containing audited consolidated financial statements for such fiscal year (or if not available, unaudited consolidated financial statements for such fiscal year) and (ii) within forty-five (45) calendar days after the end of each of its first three (3) fiscal quarters of each fiscal year, a copy of Buyer's quarterly report containing unaudited consolidated financial statements for such fiscal quarter. In all cases, the statements shall be for the most recent accounting period and shall be prepared in accordance with GAAP, provided, however, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not constitute an Event of Default so long as Buyer diligently pursues the preparation, certification and delivery of the statements.

## ARTICLE 7: FORCE MAJEURE

**7.1 Remedial Action.** A Party shall not be liable to the other Party if the Party is prevented from performing its obligations hereunder due to a Force Majeure Event. The Party rendered unable to fulfill an obligation by reason of a Force Majeure Event shall take all action necessary to remove such inability with all due speed and diligence. The non-performing Party shall be prompt and diligent in attempting to mitigate the effects of and to remove the cause of its failure to perform, and nothing herein shall be construed as permitting that Party to continue to fail to perform after said cause has been removed. Notwithstanding the foregoing, the existence of a Force Majeure Event shall not excuse any Party from its obligations to make payment of amounts due hereunder.

**7.2 Notice.** In the event of any delay or nonperformance resulting from a Force Majeure Event, the Party suffering the Force Majeure Event shall, as soon as practicable under the circumstances, notify the other Party, in writing, of the nature, cause, date of commencement, and the anticipated extent of any delay or interruption in performance.

**7.3 Termination Due To Force Majeure Event.** If a Party is prevented in any material respect from performing any material obligations under this Agreement solely due to a Force Majeure Event lasting for a period of twelve (12) consecutive months or longer, the unaffected Party may terminate this Agreement, without liability of either Party to the other, upon thirty (30) calendar days' prior written notice at any time

following expiration of such period of twelve (12) consecutive months. This Section 8.3 shall not affect the rights and remedies associated with any other termination rights set forth in this Agreement.

## ARTICLE 8: REMEDIES FOR FAILURE TO DELIVER

### 8.1 Renewable Shortfalls.

- (a) If, in any calendar year, Seller fails to deliver the total quantity of Renewable Energy that it is required to deliver in that calendar year (as set forth in Exhibit A) then Seller shall pay Buyer:
  - (i) the positive difference between the Contract Price and the Replacement Price for Renewable Energy, and
  - (ii) an amount equal to ten percent (10%) of the contract price for the Renewable Energy, for each MWh of Renewable Energy that Seller failed to deliver during that calendar year.
  - (iii) the Parties agree that the damages sustained by Buyer associated with Seller's failure to achieve the Renewable Energy quantities would be difficult or impossible to determine, or that obtaining an adequate remedy would be unreasonably time consuming or expensive and therefore agree that the Seller shall pay the damages specified in this Section 8.1(b) to Buyer as liquidated damages.
- (b) No later than thirty (30) days following the Delivery Deadline for the relevant calendar year, Seller shall calculate whether it delivered the Renewable Energy quantities it was required to deliver in the prior calendar year, and, if not, shall credit the amounts required by this Section 8.1 in its next monthly invoice submitted to the City. The invoice shall include the basis for calculation of the credit and Seller shall provide to the City any information reasonably requested by the City to demonstrate Seller's compliance with this sub-section.

**8.2 Failure to meet the Carbon Content Standard.** If in any calendar year, the total carbon emissions of the CAISO Energy delivered under this Agreement (calculated pursuant to Exhibit B) exceeds the Carbon Content levels set forth in Exhibit B, Seller shall pay Buyer damages calculated as the REC Price set forth in Exhibit C multiplied by the amount of the additional deliveries of Renewable Energy necessary to reduce the total annual carbon emissions to the applicable Carbon Content Requirement by crediting the amounts required to be paid by Seller pursuant this subsection in its next monthly invoice submitted to Buyer.

**8.3 Use of Buyer's Facilities to Replace Non-Delivered Products.** In the event Seller fails to deliver Product as required by this Agreement, Buyer may utilize City-owned facilities to replace such shortfall. In the event Buyer utilizes City-owned facilities to replace undelivered Product, the Replacement Price for such Product shall be (1) if the undelivered Product is not reasonably available in the market, the sum of the Buyer's auditable costs of its use of the City facilities; or (2) in all other cases, the market price for such Product, as reasonably determined by Buyer.

## ARTICLE 9: EVENTS OF DEFAULT; REMEDIES

**9.1 Events of Default.** The occurrence of any of the following shall constitute an Event of Default by a Party (a "Defaulting Party"):

- (a) the breach of any material covenant or obligation set forth in this Agreement and such Party fails to cure such breach within thirty (30) calendar days after written notification of default by the other Party; however, the Parties may mutually agree upon a longer period for cure if the Event of Default cannot reasonably be cured within such initial (30) day period;
- (b) subject to Section 4.3 the failure to make, when due, any payment required pursuant to a Transaction if such failure is not remedied within ten (10) Business Days after written notice that such payment is due;
- (c) any representation or warranty made by such Party herein is false or misleading in any material respect when made or when deemed made or repeated, and is not cured or remedied within thirty (30) days after written notice;
- (d) such Party becomes Bankrupt; the failure of such Party to satisfy the creditworthiness/collateral requirements agreed to pursuant to Article 5;
- (e) such Party consolidates or amalgamates with, or merges with or into, or transfers all or substantially all of its assets to, another entity and, at the time of such consolidation, amalgamation, merger or transfer, the resulting, surviving or transferee entity fails to assume all the obligations of such Party under this Agreement to which it or its predecessor was a party by operation of law or pursuant to an agreement reasonably satisfactory to the other Party;

## 9.2 Termination for Default.

- (a) Declaration of an Early Termination Date. If an Event of Default with respect to a Defaulting Party has occurred, is continuing, and has not been cured, the other Party (the “Non-Defaulting Party”) shall have the right to:
  - (i) designate a day, no earlier than ten (10) calendar days after such notice is deemed to be received, as an early termination date (“Early Termination Date”);
  - (ii) accelerate all amounts owing between the Parties and to liquidate and terminate all, but not less than all, Transactions (each referred to as a “Terminated Transaction”) between the Parties and terminate this Agreement;
  - (iii) collect as of the Early Termination Date the Termination Payment;
  - (iv) withhold any payments due to the Defaulting Party under this Agreement, and;
  - (v) suspend performance;
  - (vi) exercise its rights pursuant to Article 5 of this Agreement to draw upon and retain any Collateral Posting or Performance Assurance;
  - (vii) exercise any other right of remedy available at law or in equity to the extent otherwise permitted under this Agreement.
- (b) Calculation of Termination Payment.

- (i) The Non-Defaulting Party shall calculate, in a commercially reasonable manner, a Settlement Amount for each such Terminated Transaction as of the Early Termination Date (or, to the extent that in the reasonable opinion of the Non-Defaulting Party certain of such Terminated Transactions are commercially impracticable to liquidate and terminate or may not be liquidated and terminated under applicable law on the Early Termination Date, as soon thereafter as is reasonably practicable. Third parties supplying such information for purposes of the calculation of Gains or Losses may include, without limitation, dealers in the relevant markets, end-users of the relevant product, information vendors, and other sources of market information.
  - (ii) The Non-Defaulting Party shall aggregate all Settlement Amounts into a single amount by: netting out (a) all Settlement Amounts that are due to the Defaulting Party, plus, at the option of the Non-Defaulting Party, any cash or other form of security then available to the Non-Defaulting Party pursuant to Article 8, plus any or all other amounts due to the Defaulting Party under this Agreement against, (b) all Settlement Amounts that are due to the Non-Defaulting Party, plus any or all other amounts due to the Non-Defaulting Party under this Agreement, so that all such amounts shall be netted out to a single liquidated amount (the "Termination Payment").
  - (iii) Notwithstanding the foregoing, if the aggregation of Settlement Amounts results in a Termination Payment being owed to the Defaulting Party, the Termination Payment shall be deemed to be zero (\$0).
  - (iv) The Non-Defaulting Party shall not be required to enter into replacement transactions to establish a Termination Payment.
  - (v) The Termination Payment shall be the sole and exclusive remedy available to the Non-Defaulting Party and shall not include consequential, incidental, punitive, exemplary, indirect, or business interruption damages.
- (c) Notice of Termination Payment. As soon as practicable after a liquidation, notice shall be given by the Non-Defaulting Party to the Defaulting Party of the amount of the Termination Payment, if any. The notice shall include a written statement explaining in reasonable detail the calculation of such amount and the sources for such calculation. The Termination Payment shall be made by the Defaulting Party within fifteen (15) Business Days after such notice is effective.
- (d) Disputes With Respect to Termination Payment. If the Defaulting Party disputes the Non-Defaulting Party's calculation of the Termination Payment, in whole or in part, the Defaulting Party shall, within fifteen (15) Business Days of receipt of Non-Defaulting Party's calculation of the Termination Payment, provide to the Non-Defaulting Party a detailed written explanation of the basis for such dispute; provided, however, that if the Termination Payment is due from the Defaulting Party, the Defaulting Party shall first transfer Performance Assurance to the Non-Defaulting Party in an amount equal to the Termination Payment. Disputes regarding the Termination Payment shall be resolved in accordance with Section 12.3.

### 9.3 LIMITATION OF LIABILITY AND DAMAGES.



- (a) **THERE IS NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ANY AND ALL IMPLIED WARRANTIES ARE DISCLAIMED.**
- (b) **THE PARTIES CONFIRM THAT THE EXPRESS REMEDIES AND MEASURES OF DAMAGES PROVIDED IN THIS AGREEMENT SATISFY THE ESSENTIAL PURPOSES HEREOF. FOR BREACH OF ANY PROVISION FOR WHICH AN EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED, SUCH EXPRESS REMEDY OR MEASURE OF DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY, THE OBLIGOR'S LIABILITY SHALL BE LIMITED AS SET FORTH IN SUCH PROVISION AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED. IF NO REMEDY OR MEASURE OF DAMAGES IS EXPRESSLY PROVIDED HEREIN OR IN A TRANSACTION, THE OBLIGOR'S LIABILITY SHALL BE LIMITED TO DIRECT ACTUAL DAMAGES ONLY, SUCH DIRECT ACTUAL DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED. UNLESS EXPRESSLY HEREIN PROVIDED, NEITHER PARTY SHALL BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS OR OTHER BUSINESS INTERRUPTION DAMAGES, BY STATUTE, IN TORT OR CONTRACT, UNDER ANY INDEMNITY PROVISION SET FORTH IN THIS AGREEMENT OR OTHERWISE; PROVIDED, HOWEVER, NOTHING IN THIS SECTION SHALL AFFECT THE ENFORCEABILITY OF THE PROVISIONS OF THIS AGREEMENT RELATING TO REMEDIES FOR FAILURE TO DELIVER IN ARTICLE 8, AND CALCULATION AND PAYMENT OF THE TERMINATION PAYMENT IN SECTIONS 9.2 AND 9.3. IT IS THE INTENT OF THE PARTIES THAT THE LIMITATIONS HEREIN IMPOSED ON REMEDIES AND THE MEASURE OF DAMAGES BE WITHOUT REGARD TO THE CAUSE OR CAUSES RELATED THERETO, INCLUDING THE NEGLIGENCE OF ANY PARTY, WHETHER SUCH NEGLIGENCE BE SOLE, JOINT OR CONCURRENT, OR ACTIVE OR PASSIVE. TO THE EXTENT ANY DAMAGES REQUIRED TO BE PAID HEREUNDER ARE LIQUIDATED, THE PARTIES ACKNOWLEDGE THAT THE DAMAGES ARE DIFFICULT OR IMPOSSIBLE TO DETERMINE, OR OTHERWISE OBTAINING AN ADEQUATE REMEDY IS IMPRACTICABLE. THE PARTIES FURTHER AGREE THAT PAYMENT OF SUCH AMOUNTS SHALL BE AS AND FOR LIQUIDATED DAMAGES AND NOT AS A PENALTY AND ARE THEREFORE NOT SUBJECT TO AVOIDANCE UNDER CALIFORNIA CIVIL CODE SECTION 1671.**
- (c) **BUYER'S PAYMENT OBLIGATIONS UNDER THE AGREEMENT SHALL BE LIMITED TO THE PAYMENT OF THE COMPENSATION PROVIDED UNDER THIS CONTRACT, INCLUDING, BUT NOT LIMITED TO, THE COMPENSATION PROVIDED FOR IN ARTICLES 8 AND 9.**

#### **ARTICLE 10: INDEMNIFICATION**

##### **10.1 Hold Harmless and Indemnification.**

- (a) Each Party shall indemnify, defend and hold harmless the other Party from and against any Claims arising from or out of any event, circumstance, act or incident first occurring or existing during the period when control and title to Product is vested in such Party as provided in Section 3.2. Each Party shall indemnify, defend and hold harmless the other Party against any Governmental Charges for which such Party is responsible under Article 9.
- (b) If a Party determines that it is entitled to defense and indemnification under this Section 10.1 (“Indemnified Party”), such Party shall promptly notify the other Party (“Indemnifying Party”) in writing of the losses, and provide all reasonably necessary or useful information, and authority to settle and/or defend the losses. No settlement that would impose costs or expense upon the Indemnifying Party shall be made without such Party’s prior written consent.
- (c) Notice. If an Indemnified Party determines that it is entitled to defense and indemnification under this Section 10.1, such Indemnified Party shall promptly notify the Indemnifying Party in writing of the losses, and provide all reasonably necessary or useful information, and authority to settle and/or defend the losses. No settlement that would impose costs or expense upon the Indemnified Party shall be made without such Party’s prior written consent.

**10.2 Debt Liability Disclaimer.** Buyer shall not be liable for and shall be held harmless and indemnified by Seller for (a) any claims or damages arising out of any other contract to which Seller is a party, and (b) any tortious action or inaction, negligent error in judgment, act of negligence, intentional tort, negligent mistakes or other acts taken or not taken by the Seller, its employees, agents, servants, invitees, guests or anyone acting in concert with or on behalf of the Seller.

## ARTICLE 11: REPRESENTATIONS AND WARRANTIES

**11.1 Seller’s Representations and Warranties.** In addition to the representations and warranties set forth in other sections of this Agreement, Seller represents and warrants to Buyer that as of the Execution Date:

- (a) Seller is duly organized and validly existing as a \_\_\_\_\_ under the laws of \_\_\_\_\_, and has the lawful power to engage in the business it presently conducts and contemplates conducting in this Agreement, and Seller is duly qualified in California and each jurisdiction wherein the nature of the business transacted by it makes such qualification necessary;
- (b) Seller has the legal power and authority to make and carry out this Agreement and to perform all of its obligations hereunder and all such actions have been duly authorized by all necessary proceedings on its part;
- (c) The execution, delivery and performance of this Agreement by Seller shall not conflict with its governing documents, any Applicable Laws, or any covenant, agreement, understanding, decree or order to which Seller is a party or by which it is bound or affected;
- (d) This Agreement has been duly and validly executed and delivered by Seller and, as of the Execution Date, constitutes a legal, valid and binding obligation of Seller, enforceable in accordance with its terms against Seller, except to the extent that its enforceability may be

limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the rights of creditors generally or by general principles of equity;

- (e) There are no actions, suits, proceedings or investigations pending or, to the knowledge of Seller, threatened, in writing, against Seller or any of its affiliates, at law or in equity, before any Governmental Authority, which individually or in the aggregate are reasonably likely to have a materially adverse effect on the business, properties or assets or the condition, financial or otherwise, of Seller, or to result in any impairment of Seller's ability to perform its obligations under this Agreement;
- (f) It is not Bankrupt and there are no proceedings pending or being contemplated by it or any of its affiliates, or, to its knowledge, threatened against it or its affiliates which would result in it being or becoming Bankrupt; and
- (g) It is a forward contract merchant within the meaning of the U.S. Bankruptcy Code (as in effect as of the Execution Date of this Agreement).

**11.2 Buyer Representations and Warranties.** Buyer represents and warrants to Seller that as of the Execution Date:

- (a) Buyer is a municipal corporation, duly organized and validly existing, and has the lawful power to engage in the business it presently conducts and contemplates conducting in this Agreement;
- (b) Buyer has the legal power and authority to make and carry out this Agreement and to perform its obligations hereunder and all such actions have been duly authorized by all necessary proceedings on its part;
- (c) The execution, delivery and performance of this Agreement by Buyer shall not conflict with its governing documents, any Applicable Laws or any covenant, agreement, understanding, decree or order to which Buyer is a party or by which it is bound or affected;
- (d) This Agreement has been duly and validly executed and delivered by Buyer and, as of the Execution Date, constitutes a legal, valid and binding obligation of Buyer, enforceable in accordance with its terms against Buyer, except to the extent that its enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the rights of creditors generally or by general principles of equity;
- (e) There are no actions, suits, proceedings or investigations pending or, to the knowledge of Buyer, threatened, in writing, against Buyer, at law or in equity, before any Governmental Authority, which individually or in the aggregate are reasonably likely to have a materially adverse effect on the business, properties or assets or the condition, financial or otherwise, of Buyer, or to result in any impairment of Buyer's ability to perform its obligations under this Agreement;
- (f) It is not Bankrupt and there are no proceedings pending or being contemplated by it or, to its knowledge, threatened against it which would result in it being or becoming Bankrupt; and
- (g) It is a forward contract merchant within the meaning of the U.S. Bankruptcy Code (as in effect as of the Execution Date of this Agreement).

**11.3 Covenants.** In addition to other covenants in this Agreement, each Party covenants that throughout the Delivery Term:

- (a) it shall continue to be duly organized, validly existing and in good standing under the Applicable Laws of the jurisdiction of its formation;
- (b) it shall maintain (or obtain from time to time as required, including through renewal, as applicable) all regulatory authorizations necessary for it to legally perform its obligations under this Agreement; and
- (c) it shall perform its obligations under this Agreement in a manner that does not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any Applicable Law.

## ARTICLE 12: MISCELLANEOUS

### 12.1 Assignment.

- (a) Consent. Except as provided in Sections 12.2(b) and (c), neither Party shall assign this Agreement or its rights hereunder without the prior written consent of the other Party, which consent shall not be unreasonably withheld, conditioned or delayed so long as among other things, (i) the assignee assumes the transferring Party's payment and performance obligations under this Agreement, (ii) the assignee agrees in writing to be bound by the terms and conditions hereof, (iii) the transferring Party delivers financial statements, information and other evidence satisfactory to the non-transferring Party of the proposed assignee's technical and financial capability to fulfill the assigning Party's obligations hereunder, and (iv) the transferring Party delivers such tax and enforceability assurance as the other Party may reasonably request.
- (b) Assignment in Connection with a Change in Control. Notwithstanding any provision to the contrary in this Section 12.1, any direct or indirect change of control of Seller (whether voluntary or by operation of Law) shall be deemed an assignment and shall require the prior written consent of Buyer, which consent shall not be unreasonably withheld, conditioned or delayed. At Buyer's request, Seller shall promptly deliver financial statements, information and other evidence satisfactory to Buyer regarding the proposed change of control of Seller.
- (c) Unauthorized Assignment. Any assignment or purported assignment in violation of this Section 12.1 is void.

### 12.2 Proprietary or Confidential Information.

- (a) Buyer Confidential Information. Seller understands and agrees that, in the performance of this Agreement or in contemplation thereof, Seller may have access to private or confidential information which may be owned or controlled by Buyer and that such information may contain proprietary or confidential details, the disclosure of which to third parties may be damaging to Buyer. Seller agrees that all private and confidential information disclosed by Buyer to Seller shall be held in confidence and used only in performance of the Agreement. Seller shall exercise the same standard of care to protect

such information as a reasonably prudent person would use to protect its own proprietary data.

- (b) Public Records Act and Sunshine Ordinance. Seller acknowledges that Buyer is a public agency subject to the disclosure requirements of the Public Records Laws. If documents or information submitted to Buyer contain Seller's proprietary and confidential information and Seller claims that such information falls within one or more Public Records Laws exemptions, Seller must clearly mark such information "CONFIDENTIAL AND PROPRIETARY", and identify the specific lines containing such information (the "Confidential Information"). Buyer shall disclose such Confidential Information to third parties only to the extent required by California law (including, without limitation, the California Constitution, the Public Records Laws, and other Applicable Law.
- (c) Disclosure of Confidential Information by Buyer. In the event of a third party request for Buyer to disclose such Confidential Information, Buyer shall make reasonable efforts to provide notice to Seller prior to disclosure. If Seller contends that any Confidential Information is exempt from the Public Records Laws and wishes to prevent disclosure, Seller shall obtain a protective order, injunctive relief or other appropriate remedy from a court of law in San Francisco County before Buyer's deadline for responding to the disclosure request. If Seller fails to obtain such remedy prior to Buyer's deadline for responding to the request, Seller agrees that Buyer may disclose the requested Confidential Information. Seller further agrees that Buyer shall have no liability to Seller arising out of any disclosure by Buyer of any Seller Confidential Information before Seller has timely obtained an order, injunctive relief or other appropriate remedy to prevent Buyer from making the requested third party disclosure.
- (d) Non-Confidential Information. Notwithstanding anything to the contrary in this Section 12.2 nothing shall restrict any Party from using or disclosing information related to this Agreement, including Confidential Information if such information (i) is generally available to the public; (ii) was within the using or disclosing Party's possession prior to it being furnished hereunder, provided that such information is not subject to another confidentiality agreement with, or other contractual, legal or fiduciary obligation of confidentiality to, any other party with respect to such information; (iii) is rightfully obtained by a Party from third parties authorized to make such disclosure without restriction; (iv) is legally required to be disclosed by judicial or other governmental action as determined by such Party's attorney acting in good faith; or (v) is disclosed without a duty of confidentiality to a third party by, or with the authorization of, the disclosing Party; or (vi) is furnished to the non-disclosing Party's Affiliates, and to each of such person's auditors, attorneys, advisors or lenders which are required to keep the information that is disclosed in confidence.
- (e) Nondisclosure of Private Information. If this Agreement requires Buyer to disclose "Private Information" to Seller within the meaning of San Francisco Administrative Code Chapter 12M, Seller shall use such information only in accordance with the restrictions stated in Chapter 12M and in this Agreement and only as necessary in performing this Agreement. Seller is subject to the enforcement and penalty provisions in Chapter 12M.

### **12.3 Dispute Resolution; Choice of Law; Venue.**

- (a) Negotiation; Dispute Resolution. The Parties will attempt in good faith to resolve any dispute or controversy arising out of or relating to the performance of this Agreement by

negotiation. The status of any dispute or controversy notwithstanding, each Party shall proceed diligently with the performance of its obligations under this Agreement in accordance with and subject to the terms of this Agreement. If agreed by both Parties in writing, disputes may be resolved by a mutually agreed-upon alternative dispute resolution process. Neither Party will be entitled to legal fees or costs for matters resolved under this section.

- (b) Choice of Law; Venue. This Agreement and the rights and duties of the Parties hereunder shall be construed, enforced and performed in accordance with the laws of the state of California, and/or the laws of the United States, as applicable, without regard to principles of conflicts of law which may direct the application of the laws of another jurisdiction. Venue shall be in the County of San Francisco, State of California

**12.4 Audit.** Each Party has the right, at its sole expense and during normal working hours, to examine the records of the other Party to the extent reasonably necessary to verify the accuracy of any statement, charge or computation made pursuant to this Agreement. The Parties shall maintain such data and records in an accessible location and condition for a period of not fewer than five (5) years after final payment under this Agreement or until after final audit has been resolved, whichever is later.

#### **12.5 General.**

- (a) Entire Agreement. This Agreement; the exhibits, attachments, and any written and fully executed supplements hereto, and any designated collateral, credit support, or margin agreement or similar arrangement between the Parties constitute the entire agreement between the Parties relating to the subject matter.
- (b) Construction. This Agreement shall be considered for all purposes as prepared through the joint efforts of the Parties and shall not be construed against one party or the other as a result of the preparation, substitution, submission or other event of negotiation, drafting or execution hereof.
- (c) Amendments. Except to the extent herein provided for, no amendment or modification to this Agreement shall be enforceable unless reduced to writing and executed by both Parties. Each Party agrees if it seeks to amend any applicable wholesale power sales tariff during the term of this Agreement, such amendment will not in any way affect outstanding Transactions under this Agreement without the prior written consent of the other Party. Each Party further agrees that it will not assert, or defend itself, on the basis that any applicable tariff is inconsistent with this Agreement.
- (d) No Third Party Beneficiaries. This Agreement shall not impart any rights enforceable by any third party (other than a permitted successor or assignee bound to this Agreement).
- (e) No Waiver. Waiver by a Party of any default by the other Party shall not be construed as a waiver of any other default.
- (f) Change in Law. If any provision of this Agreement is rendered unlawful by action by any Governmental Authority, or any change in Applicable Law (a "Change in Law") occurring after the Execution Date, the remaining lawful obligations that arise under this Agreement shall not be affected. If the Change in Law results in material changes to the Parties' obligations with regard to any Product sold hereunder and that has the effect of changing the transfer and sale procedure set forth in this Agreement so that the implementation of

this Agreement becomes impossible or impracticable, or otherwise modifies the RPS or language required to conform to the RPS, the Parties shall work in good faith to revise this Agreement in a manner that maintains to the greatest extent practicable the original intent of the Parties under this Agreement so that the Parties may perform their obligations regarding the purchase and sale of Product. If the Parties cannot reach a good faith agreement on amendments, the Agreement shall be terminated by mutual agreement without liability for either Party.

- (g) Headings. The headings used herein are for convenience and reference purposes only.
- (h) Assigns. This Agreement shall be binding on each Party's successors and permitted assigns.
- (i) No Dedication. No undertaking by one Party to the other under any provision of the Agreement shall constitute the dedication of that Party's system or any portion thereof to the other Party or to the public or affect Seller as an independent entity and not a public utility.
- (j) Relationship of the Parties. The duties, obligations and liabilities of the Parties are independent of one another and shall be limited to those expressly set forth herein. This Agreement shall not be interpreted or construed to create an association, joint venture, fiduciary relationship or partnership between Seller and Buyer or to impose any partnership obligation or liability or any trust or agency obligation or relationship upon either Party. Seller and Buyer shall not have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or act as or be an agent or representative of or otherwise bind the other Party. Seller and Buyer intend to act as energy supplier and energy purchaser, respectively, and do not intend to act as, or to be treated as, partners in, co-venturers in, or lessor/lessee with respect to any generating facility or any business related to a generating facility.
- (k) Severability. Should any provision of the Agreement be or become void, illegal or unenforceable, the validity or enforceability of the other provisions of the Agreement shall not be affected and shall continue in full force and effect. The Parties shall, however, use their best endeavors to agree on the replacement of the void, illegal, or unenforceable provision(s) with legally acceptable clauses which correspond as closely as possible to the sense and purpose of the affected provision.
- (l) Survival. All rights pursuant to (i) Section 4.1(d) (Disputes and Adjustment of Invoices); Article 10 (Events of Default; Remedies; Limitations), (iii) Article 11 (Indemnification), (iv) Section 13.2 (Confidential Information); (v) Section 13.3 (Dispute Resolution/Choice of Law), and (vi) Section 13.4 (Audit); (vii) Section 13.6(c) (Prohibition of Political Use of City Funds); (viii) Section 13.6(e) (False Claims), and; (ix) Section 13.6(f) (City Opinion) shall survive termination of this Agreement.

## 12.6 City Contracting Requirements.

- (a) Compliance with Americans with Disabilities Act. Seller acknowledges that, pursuant to the Americans with Disabilities Act (ADA), programs, services and other activities provided by a public entity to the public, whether directly or through a contractor, must be accessible to the disabled public. Seller shall provide the services specified in this Agreement in a manner that complies with the ADA and any and all other applicable

federal, state and local disability rights legislation. Seller agrees not to discriminate against disabled persons in the provision of services, benefits or activities provided under this Agreement and further agrees that any violation of this prohibition on the part of Seller, its employees, agents or assigns will constitute a material breach of this Agreement.

- (b) Limitations on Contributions. Through execution of this Agreement, Seller acknowledges that it is familiar with Section 1.126 of City's Campaign and Governmental Conduct Code, which prohibits any person who contracts with City for the rendition of personal services or for the furnishing of any material, supplies or equipment to City, whenever such transaction would require approval by City's elective officer of the board on which that elective officer serves, from making any campaign contribution to the officer at any time from the commencement of negotiations for the contract until the later of either: (1) the termination of negotiations for such contract, or (2) three months after the date this Agreement is approved by the City's elective officer or the board on which that elective officer serves.
- (c) Prohibition on Political Activity with City Funds. In accordance with San Francisco Administrative Code Chapter 12.G, Seller may not participate in, support, or attempt to influence any political campaign for a candidate or for a ballot measure in San Francisco (collectively, "Political Activity") in the performance of this Agreement. Seller agrees to comply with San Francisco Administrative Code Chapter 12.G and any implementing rules and regulations promulgated by the Controller. The terms and provisions of Chapter 12.G are incorporated herein by this reference. In the event Seller violates the provisions of this Section, Buyer may, in addition to any other rights or remedies available hereunder, (i) terminate this Agreement, and (ii) prohibit Seller from bidding on or receiving any new City contract for a period of two years. The Controller will not consider Seller's use of profit as a violation of this Section.
- (d) Non-Discrimination Requirements.
  - (i) Seller shall comply with the provisions of Chapter 12B of the San Francisco Administrative Code. Seller shall incorporate by reference in all subcontracts the provisions of Sections 12B.2(a) and 12B.2(c)-(k) of the San Francisco Administrative Code and shall require all subcontractors to comply with such provisions. Seller is subject to the enforcement and penalty provisions in Chapters 12B and 12C.
  - (ii) Seller represents that it does not as of the date of this Agreement, and will not during the term of this Agreement, in any of its operations in San Francisco, on real property owned by San Francisco, or where work is being performed for the Buyer elsewhere in the United States, discriminate in the provision of employee benefits between employees with domestic partners and employees with spouses and/or between the domestic partners and spouses of such employees, subject to the conditions set forth in San Francisco Administrative Code Section 12B.2.
- (e) Submitting False Claims; Monetary Penalties. Pursuant to San Francisco Administrative Code §21.35, any contractor, subcontractor or consultant who submits a false claim shall be liable to the Buyer for the statutory penalties set forth in that section. A contractor, subcontractor or consultant will be deemed to have submitted a false claim to the Buyer if the contractor, subcontractor or consultant: (a) knowingly presents or causes to be presented to an officer or employee of the Buyer a false claim or request for payment or



approval; (b) knowingly makes, uses, or causes to be made or used a false record or statement to get a false claim paid or approved by the Buyer; (c) conspires to defraud the Buyer by getting a false claim allowed or paid by the Buyer; (d) knowingly makes, uses, or causes to be made or used a false record or statement to conceal, avoid, or decrease an obligation to pay or transmit money or property to the Buyer; or (e) is a beneficiary of an inadvertent submission of a false claim to the Buyer, subsequently discovers the falsity of the claim, and fails to disclose the false claim to the Buyer within a reasonable time after discovery of the false claim.

- (f) Use of Buyer Opinion. Seller shall not quote, paraphrase, or otherwise refer to or use any opinion of Buyer, its officers or agents, regarding Seller or Seller's performance under this contract without prior written permission of the SFPUC.
- (g) Compliance with Laws. Seller shall keep itself fully informed of the City Charter, codes, ordinances and regulations of the City and of all state, and federal laws in any manner affecting the performance of its obligations under this Agreement, and must at all times materially comply with such local codes, ordinances, and regulations and all applicable laws as they may be amended from time to time. Buyer shall provide notice to Seller of any such amendment to City's Charter, codes, ordinances and regulations of which it becomes aware
- (h) Conflict of Interest. Through its execution of this Master Agreement, Seller acknowledges that it is familiar with the provision of Section 15.103 of City's Charter, Article III, Chapter 2 of City's Campaign and Governmental Conduct Code, and Section 87100 et seq. and Section 1090 et seq. of the Government Code of the State of California, and certifies that it does not know of any facts which constitutes a violation of said provisions and agrees that it will immediately notify the Buyer if it becomes aware of any such fact during the term of this Agreement.

**12.7 Mobile Sierra.** Absent the agreement of all Parties to the proposed change, the standard of review for changes to any rate, charge, classification, term or condition of this Agreement, whether proposed by a Party (to the extent that any waiver in subsection (b) below is unenforceable or ineffective as to such Party), a non-party or FERC acting sua sponte, shall be the "public interest" standard of review set forth in United Gas Pipe Line Co. v. Mobile Gas Service Corp., 350 U.S. 332 (1956) and Federal Power Commission v. Sierra Pacific Power Co., 350 U.S. 348 (1956).

**12.8 Forward Contract.** The Parties acknowledge and agree that this Agreement constitutes a "forward contract" within the meaning of the United States Bankruptcy Code.

**12.9 Notices.** Unless otherwise stated in this Agreement, any notice, demand, request, or communication required or authorized by this Agreement shall be delivered either by hand, facsimile, electronic mail, overnight courier or mailed by certified mail, return receipt requested with postage prepaid, to the contacts set forth in the Cover Sheet. Either Party may change any information listed in the Notice section of the Cover Sheet, by written notice as provided in this Section. Any such notice, demand, request, or communication shall be deemed received on the Business Day on which the notice was transmitted if delivery was made by hand, facsimile or electronic mail, or (ii) upon receipt by the receiving Party if sent by overnight courier or mailed by certified mail, return receipt requested with postage prepaid.

**12.10 Counterparts.** This Agreement may be executed in one or more counterparts and by different Parties on separate counterparts, all of which shall be deemed one and the same agreement and each of which shall be deemed an original. Delivery of an executed counterpart of this Agreement by electronic

means shall be deemed as effective as delivery of an originally executed counterpart. Any Party delivering an executed counterpart of this Agreement by electronic means shall also deliver an originally executed counterpart, but the failure of any Party to deliver an originally executed counterpart of this Agreement shall not affect the validity or effectiveness of this Agreement.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed as of the Execution Date.

City and County of San Francisco,  
acting by and through its  
Public Utilities Commission, CleanPowerSF

By: \_\_\_\_\_  
Harlan J. Kelly, Jr.  
General Manager,  
San Francisco Public Utilities Commission

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

Approved as to Form:

Dennis J. Herrera  
City Attorney

By: \_\_\_\_\_  
Deputy City Attorney

**[PORTFOLIO PRODUCT]**

**EXHIBIT A  
CONTRACT QUANTITIES  
(Page 1 of 5)**

**EXHIBIT A-1:**

**EXHIBIT A-2:**

**WEEKDAY HOURLY QUANTITIES  
(INCLUDING ANY RENEWABLE ENERGY DELIVERED DURING SUCH MONTH)**

**[Table to be inserted]**

**EXHIBIT A-3:**

**WEEKEND HOURLY QUANTITIES  
(INCLUDING ANY RENEWABLE ENERGY DELIVERED DURING SUCH MONTH)**

[Table to be inserted]

**EXHIBIT A4:**  
**RENEWABLE ENERGY QUANTITIES**

**EXHIBIT A-5  
GENERATION RESOURCES**

No.	Name of Facility:	Fuel Source:	Location:	CEC ID:	WREGIS ID:
1					
2					
3					
4					
5					

**EXHIBIT B**

**CARBON CONTENT STANDARD AND CALCULATION METHODOLOGY**

A. **Annual Portfolio Carbon Content Requirements.** During each calendar year of the Delivery Period, the carbon content of the Product supplied by Seller to Buyer shall be equal to or less than the following amounts:

2018:

2019:

2020:

2021:

B. **Calculation Methodology**

1. The carbon content of any Energy supplied by a specified non-renewable or non-carbon-free generator (e.g., a conventional generator, using a fuel source such as natural gas) will be assigned the most current actual, documented emission factor associated with such generator approved by CARB. The carbon content of any unspecified purchases shall be calculated in accordance with the most current emissions factors adopted by CARB as they may be amended from time to time.

2. The carbon content of the Product supplied by Seller to Buyer in each calendar year shall be calculated by aggregating the pounds of CO<sub>2</sub> associated with all Energy supplied to Buyer in such calendar year and dividing same by the aggregate amount of Energy supplied in such calendar year (in MWhs and including any Additional Low Carbon Energy supplied by Seller during such calendar year). For purposes of aggregating the pounds of CO<sub>2</sub> associated with all Energy supplied to Buyer in such calendar year across generating units, the pounds of CO<sub>2</sub> associated with each generating unit from which Energy is supplied by Seller to Buyer in such calendar year shall be obtained by multiplying (a) the amount of Energy (in MWhs) provided by such unit and delivered to Buyer pursuant to this Confirmation in such calendar year by (b) the carbon content assigned to such Energy pursuant to Section 3.2. The following formula illustrates the agreed methodology for calculation of the carbon content of the Product:

$$\sum_{i=1}^U (A * B)$$

-----  
C

Where:

U = all generating units from which Energy is supplied by Seller to Buyer in such calendar year



A = the carbon content of Energy supplied by a generating unit from which Energy was supplied by Seller to Buyer in such calendar year (expressed in pounds of CO<sub>2</sub>/MWh as provided in Section 3.2)

B = the total number of MWhs of Energy supplied from such generating unit by Seller to Buyer in such calendar year

C = the total number of MWhs of Energy supplied by Seller as part of the Product (including but not limited to PCC1 Energy and Additional Low Carbon Energy) in such calendar year.

In order to provide evidence of the amount of Energy supplied by individual generating units for purposes of calculating the carbon content of the Product, Seller may provide (i) Associated RECs, (ii) NERC e-Tags and/or (iii) records of metered data.

3. No PCC 3 RECs. Seller shall not satisfy the carbon content requirement through the delivery of PCC 3 RECs.

OR

**[ALTERNATIVE CARBON-FREE PORTFOLIO REQUIREMENT]**

If the Parties agree to substitute deliveries of Additional Carbon Free Energy in lieu of the Carbon Content Standard, the Agreement will be modified as follows:

1. The following definitions shall be added to Article 1 of the Agreement:

**Additional Carbon Free Energy:** Means the quantity of Carbon Free Energy that is in excess of the PCC 1 Energy Quantity to be delivered by Seller to Buyer in this Transaction. During the Delivery Period, Seller shall provide the Additional Carbon Free Energy Quantity to Buyer such that the Additional Carbon Free Energy Quantity can be represented on the Buyer Power Content Label as being supplied from Carbon Free Source(s), based on the guidelines for the Power Content Label in place as of the Effective Date hereof. The Additional Carbon Free Energy Quantity shall not include any PCC 3 Energy.

**Carbon Free Energy:** Means Energy generated by a Carbon Free Source. If the Carbon Free Source is not located in California, the Energy shall be scheduled into a California balancing authority area, including the CAISO. Delivery of Carbon Free Energy generated by a facility located outside of California shall be validated by NERC e-Tag, which shows the Energy was scheduled into a California balancing authority area, including the CAISO.

**Carbon Free Source:** Means any Energy source, except for nuclear-powered generation assets, that is located within the Western Energy Coordinating Council area and that is considered by the State of California to have zero Greenhouse Gas emissions in accordance with the Mandatory Greenhouse Gas Emissions Reporting and California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms regulations (California Code of Regulations Title 17, Subchapter 10, Articles 2 and 5 respectively) promulgated by the California Air Resources Board of the California Environmental Protection Agency ("CARB") pursuant to the California Global Warming Solutions Act of 2006.

2. Additional Carbon Free Energy quantities will be set forth in Exhibit A.
3. Section 8.2 of the Agreement will read as follows:

**Failure to Deliver Additional Carbon Free Energy.** If in any calendar year Seller fails to deliver the quantities of Additional Carbon Free Energy set forth in Exhibit A, Seller shall pay Buyer damages calculated as \$XXXX/MWh (the "REC Price") multiplied by the shortfall in deliveries of Additional Carbon Free Energy by crediting the amounts required to be paid by Seller pursuant this subsection in its next monthly invoice submitted to Buyer

**EXHIBIT C**

**CONTRACT PRICE**

## EXHIBIT D

### FIRM RA CAPACITY REQUIREMENTS

1. **Additional Definitions.** The following definitions shall apply to the purchase and sale of Firm RA Capacity under this Agreement:

**Alternate Capacity:** Means replacement Firm RA Capacity which Seller is required provide to Buyer in accordance with the terms of Section 4.2 of this Exhibit D.

**CPUC Decisions:** Means CPUC Decisions 04-01-050, 04-10-035, 05-10-042, 06-06-064, 06-07-031 and subsequent decisions related to resource adequacy issued from time to time by the CPUC, including CPUC Decisions 13-06-024, 14-06-050, 15-06-063, and 16-06-045.

**Effective Flexible Capacity:** Means the flexible capacity of a resource that can be counted towards an LSE's FCR obligation, as identified from time to time by the CAISO Tariff, the CPUC Decisions, LRA, or other Governmental Authority having jurisdiction.

**FCR Attributes:** Means, with respect to a RA Unit, any and all FCR attributes that can be counted toward an LSE's FCR, as they are identified from time to time by the CPUC Decisions, the CAISO Tariff, an LRA, or other Governmental Authority having jurisdiction that can be counted toward FCR and are consistent with the operational limitations of such RA Unit.

**FCR Showing:** Means the FCR compliance showings (or similar or successor showings) an LSE is required to make to the CPUC (and, to the extent authorized by the CPUC, to the CAISO) pursuant to the CPUC Decisions and the CAISO Tariff, or to an LRA having jurisdiction over the LSE.

**Flexible Capacity Requirements or FCR:** Means the flexible capacity requirements established for LSEs by the CPUC pursuant to the CPUC Decisions, or by an LRA or other Governmental Authority having jurisdiction.

**LAR:** Means local area reliability, which is any program of localized resource adequacy requirements established for jurisdictional LSEs by the CPUC pursuant to the CPUC Decisions, the CAISO Tariff, or by another LRA having jurisdiction over the LSE, as implemented in the CAISO Tariff. LAR may also be known as local resource adequacy, local RAR, or local capacity requirement in other regulatory proceedings or legislative actions.

**LAR Attributes:** Means, with respect to a RA Unit, any and all resource adequacy attributes (or other locational attributes related to system reliability), as they are identified as of the Execution Date by the CPUC Decisions, CAISO, LRA, or other Governmental Authority having jurisdiction, associated with the physical location or point of electrical interconnection of the RA Unit within the CAISO Control Area, that can be counted toward LAR and are consistent with the operational limitations of such Unit, but exclusive of any Capacity Attributes which are not associated with the location in the CAISO Control Area where the RA Unit is physically located or electrically interconnected. If the CAISO, LRA, or other Governmental Authority, defines new or re-defines existing local areas, then such change will not result in a change in payments made pursuant to this Agreement.

**LAR Showings:** Means the LAR compliance showings (or similar or successor showings) an LSE is required to make to the CPUC (and, to the extent authorized by the CPUC, to the CAISO) pursuant to the CPUC Decisions, or to an LRA having jurisdiction over the LSE.

**LRA:** Means Local Regulatory Authority, as defined in the CAISO Tariff.

**LSE:** Means load-serving entity. LSEs may be an investor-owned utility, an electric service provider, a community aggregator or community choice aggregator, or a municipality serving load in the CAISO Control Area (excluding exports).

**RAR Showings:** Means the RAR compliance showings (or similar or successor showings) an LSE is required to make to the CPUC (and/or, to the extent authorized by the CPUC, to the CAISO), pursuant to the CAISO Tariff, the CPUC Decisions or LRA having jurisdiction.

**Replacement Capacity:** has the meaning specified in Section 4.7 hereof.

**Replacement Unit:** Means a generating unit providing Replacement Capacity in accordance with Section 4.2.

**Showing Month:** Means the calendar month during the Delivery Period that is the subject of the RAR Showing, LAR showing, and/or FCR Showing, as applicable, as set forth in the CPUC Decisions. For illustrative purposes only, pursuant to the CPUC Decisions in effect as of the Execution Date, the monthly RAR Showing made in June is for the Showing Month of August.

**Supply Plan:** Means the supply plans, or similar or successor filings, that each Scheduling Coordinator representing RA Capacity submits to the CAISO, LRA, or other Governmental Authority, pursuant to Applicable Law, in order for that RA Capacity to count for its RAR Attributes, LAR Attributes, and/or FCR Attributes.

**RA Unit or RA Units:** Means the generation assets described in Section 2 of Exhibit D (including any Replacement Units), from which RA Capacity is provided by Seller to Buyer.

**2. RA Unit Information.**

- Name:**
- Location:**
- CAISO Resource ID:**
- Unit SCID:**
- Resource Type:**
- Resource Category:**
- Point of Interconnection with the CAISO Grid:**
- Path 26 (North, South):**
- Local Capacity Area:**
- Deliverability Restrictions, if any:**
- Run Hour Restrictions:**
- Product Type:**
- Unit NQC/EFC:**
- FCR Category:**
- Delivery Point:**

**3. RA Contract Quantities and Price**

Month/year	RA Contract Quantity (MWs)	FCR Contract Quantity (MWs)	LAR Contract Quantity (MWs)	Firm RA Contract Price (\$kW-month)

#### 4. Resource Adequacy Capacity Product

4.1 Delivery. Seller shall provide Buyer with the RAR Capacity Attributes, LAR Attributes, and FCR Attributes from the RA Unit in the amount of the RA Contract Quantities.

4.2 Alternate Capacity and Replacement Units. If Seller is unable to provide the full RA Contract Quantities for any Showing Month for any reason other than Force Majeure, or Seller desires to provide the Contract Quantity for any Showing Month from a different generating unit other than the RA Unit, then Seller shall, at no cost to Buyer, provide Buyer with Alternate Capacity from one or more Replacement Units, with the total amount of Firm RA Capacity provided to Buyer from the RA Unit and Replacement Units up to an amount equal to the RA Contract Quantity for the applicable Showing Month. Seller shall notify Buyer of its intent to provide Alternative Capacity and identify Replacement Units meeting the above requirements no later than ten (10) Business Days before that Showing Month's applicable deadlines for Buyer's RAR Showings, LAR Showings, and/or FCR Showings. If Seller notifies Buyer in writing as to the particular Replacement Units and such Units meet the requirements of this Section 4.2 then such Replacement Units shall be automatically deemed a RA Unit for purposes of this Agreement for that Showing Month.

4.3 Delivery of Firm RA Capacity. Seller shall provide Buyer with the Firm RA Capacity for each Showing Month consistent with the following:

- (a) Seller shall, on a timely basis, submit, or cause the RA Unit's SC to submit Supply Plans to identify and confirm the Firm RAR Capacity provided to Buyer for each Showing Month so that the total amount of Firm RAR Capacity identified and confirmed for such Showing Month equals the Firm RAR Capacity, unless specifically requested not to do so by the Buyer.
- (b) Seller shall cause the RA Unit's Scheduling Coordinator to submit written notification to Buyer, no later than ten (10) Business Days before the applicable RAR Showings, LAR Showings and/or FCR Showings deadlines for each Showing Month, that Buyer will be credited with the Firm RAR Capacity for such Showing Month in the Unit's Scheduling Coordinator Supply Plan so that the Firm RAR Capacity credited equals the Firm RAR Capacity for such Showing Month.

4.4 Damages for Failure to Deliver. If Seller fails to provide Buyer with the Firm RA Capacity for any Showing Month then the following shall apply:

- (a) Buyer may, but shall not be required to, replace any portion of the Firm RA Capacity not provided by Seller with Capacity Attributes having equivalent RAR Attributes, LAR Attributes and/or FCR Attributes as the Firm RA Capacity not provided by Seller, provided, that, if any portion of the Firm RA Capacity that Buyer is seeking to replace is Firm RA Capacity having RAR Attributes and no LAR Attributes (such capacity shall also include FCR Attributes if this is a Flexible Capacity Product) and no such RAR capacity is available, then Buyer may replace such portion of the Firm RA Capacity with capacity having RAR Attributes and LAR Attributes (as well as FCR Attributes if this is a Flexible Capacity Product) ("Replacement Capacity"). Buyer may enter into purchase transactions with one or more parties to replace any portion of Firm RA Capacity not provided by Seller. Additionally, Buyer may enter into one or more arrangements to repurchase its obligation to sell and deliver capacity to another party and, to the extent such transactions are done at prevailing market prices, such arrangements shall be considered equivalent to the

procurement of Replacement Capacity. Buyer shall use commercially reasonable efforts to minimize damages when procuring any Replacement Capacity.

- (b) Seller shall pay to Buyer at the time set forth in Section 4.1 of the Master Agreement, the following damages: an amount equal to the positive difference, if any, between (i) the sum of (A) the actual cost paid by Buyer for any Replacement Capacity, plus (B) each Capacity Replacement Price times the amount of the Firm RA Capacity neither provided by Seller nor purchased by Buyer pursuant to Section 4.4(a) of Exhibit D, and (ii) the Firm RA Capacity not provided for the applicable Showing Month times the Contract Price for that month. If Seller fails to pay these damages, then Buyer may offset those damages owed it against any future amounts it may owe to Seller under this Agreement.

4.5 Indemnities for Failure to Delivery RA Contract Quantities. In addition to the Indemnities set forth in Article 10, Seller agrees to indemnify, defend and hold harmless Buyer from any penalties, fines or costs assessed against Buyer by the CPUC or the CAISO, resulting from any of the following:

- (a) Seller's failure to provide any portion of the Firm RA Capacity;
- (b) Seller's failure to provide notice of the non-availability of any portion of Firm RA Capacity as required under Section 4.6;
- (c) A RA Unit Scheduling Coordinator's failure to timely submit Supply Plans that identify Buyer's right to the Firm RA Capacity purchased hereunder; or
- (d) A RA Unit Scheduling Coordinator's failure to submit accurate Supply Plans that identify Buyer's right to the Firm RA Capacity purchased hereunder.

With respect to the foregoing, the Parties shall use commercially reasonable efforts to minimize such penalties, fines and costs; provided, that in no event shall Buyer be required to use or change its utilization of its owned or controlled assets or market positions to minimize these penalties and fines. If Seller fails to pay the foregoing penalties, fines or costs, or fails to reimburse Buyer for those penalties, fines or costs, then Buyer may offset those penalties, fines or costs against any future amounts it may owe to Seller under this Agreement.

4.6 Payment. Buyer shall make monthly payments for Firm RA Capacity in accordance with Article 4 of the Agreement. Each RA Unit's monthly payment shall be equal to the product of (a) the applicable Firm RA Contract Price for that Monthly Delivery Period, (b) the Firm RA Capacity for the Monthly Delivery Period, and (c) 1,000. The final product of this Firm RA Capacity payment calculation shall be rounded to the nearest penny (i.e., two decimal places).

4.7 Allocation of Other Payments and Costs. Seller may retain any revenues it may receive from the CAISO or any other third party with respect to any RA Unit for (a) start-up, shut-down, and minimum load costs, (b) capacity revenue for ancillary services, (c) energy sales, (d) any revenues for black start or reactive power services, or (e) the sale of the unit-contingent call rights on the generation capacity of the Unit to provide energy to a third party, so long as such rights do not confer on such third party the right to claim any portion of the Firm RA Capacity sold hereunder in order to make an RAR Showing, LAR Showing, FCR Showing, or any similar capacity or resource adequacy showing with the CAISO or CPUC. Buyer acknowledges and agrees that all Availability Incentive Payments are for the benefit of Seller and for Seller's account, and that Seller shall receive, retain, or be entitled to receive all credits, payments, and revenues, if any, resulting from Seller achieving or exceeding Availability Standards. The Parties acknowledge and agree that any Non-Availability Charges are the responsibility of Seller, and for Seller's account and Seller shall be responsible for all fees, charges, or penalties, if any, resulting from Seller failing to achieve Availability Standards. However, Buyer shall be entitled to receive and retain all revenues

associated with the Firm RA Capacity of any RA Unit during the Delivery Period (including any capacity or availability revenues from RMR Agreements for any RA Unit, Reliability Compensation Services Tariff, and Residual Unit Commitment capacity payments, but excluding payments described in clauses (a) through (c) above). In accordance with Section 4.5 of this Exhibit D all such revenues received by Seller, or a RA Unit's SC, owner, or operator shall be remitted to Buyer, and Seller shall pay such revenues to Buyer if the RA Unit's SC, owner, or operator fails to remit those revenues to Buyer. If Seller fails to pay such revenues to Buyer, Buyer may offset any amounts owing to it for such revenues against any future amounts it may owe to Seller under this Agreement. If a centralized capacity market develops within the CAISO region, Buyer will have exclusive rights to offer, bid, or otherwise submit Firm RA Capacity provided to Buyer pursuant to this Agreement for re-sale in such market, and retain and receive any and all related revenues.

**5. CAISO Offer Requirements.** During the Delivery Period, except to the extent any RA Unit is in an Outage, or is affected by an event of Force Majeure that results in a partial or full Outage of that Unit, Seller shall either schedule or cause the RA Unit's Scheduling Coordinator to schedule with, or make available to, the CAISO each RA Unit's RA Capacity in compliance with the CAISO Tariff, and shall perform all, or cause the RA Unit's Scheduling Coordinator, owner, or operator, as applicable, to perform all obligations under the CAISO Tariff that are associated with the sale of Firm RA Capacity hereunder. Buyer shall have no liability for the failure of Seller or the failure of any RA Unit's Scheduling Coordinator, owner, or operator to comply with such CAISO Tariff provisions, including any penalties or fines imposed on Seller or the RA Unit's Scheduling Coordinator, owner, or operator for such noncompliance.

**6. Other Buyer and Seller Covenants.**

6.1 In addition to the representations and covenants set forth in the Agreement, Buyer and Seller shall, throughout the Delivery Period, take all commercially reasonable actions and execute any and all documents or instruments reasonably necessary to ensure Buyer's right to the use of the RA Contract Quantity for the sole benefit of Buyer's RAR, LAR and/or FCR, as applicable. Such commercially reasonable actions shall include, without limitation:

- (a) Cooperating with and providing, and in the case of Seller causing, each RA Unit's Scheduling Coordinator, owner, or operator to cooperate with and provide requested supporting documentation to the CAISO, the CPUC, or any other Governmental Authority responsible for administering RAR, LAR and/or FCR under Applicable Laws, to certify or qualify the RA Contract Quantity as Capacity Attributes and Firm RA Capacity. Such actions shall include, without limitation, providing information requested by the CAISO, the CPUC, or by an LRA having jurisdiction, to demonstrate for each month of the Delivery Period the ability to deliver the RA Contract Quantity from each RA Unit to the CAISO Controlled Grid for the minimum hours required to qualify as Capacity Attributes, and providing information requested by the CPUC, the CAISO or other Governmental Authority having jurisdiction to administer RAR, LAR or FCR to demonstrate that the RA Contract Quantity can be delivered to the CAISO Controlled Grid, pursuant to "deliverability" standards established by the CAISO, or other Governmental Authority having jurisdiction to administer RAR, LAR and/or FCR; and
- (b) Negotiating in good faith to make necessary amendments, if any, to this Exhibit to conform this Agreement to subsequent clarifications, revisions, or decisions rendered by the CPUC, CAISO, FERC, or other Governmental Authority having jurisdiction to administer RAR, LAR and FCR, so as to maintain the purpose of the benefits of the bargain struck by the Parties on the Execution Date.



- 6.2 Seller represents, warrants and covenants to Buyer that, throughout the Delivery Period:
- (a) Seller owns or has the exclusive right to the Firm RA Capacity sold under this Agreement from each RA Unit, and shall furnish Buyer, CAISO, CPUC or other jurisdictional LRA, or other Governmental Authority with such evidence as may reasonably be requested to demonstrate such ownership or exclusive right;
  - (b) No portion of the RA Contract Quantity has been committed by Seller to any third party in order to satisfy RAR, LAR, FCR or such analogous capacity obligations in CAISO markets, other than pursuant to an RMR Agreement between the CAISO and either Seller or the RA Unit's owner or operator;
  - (c) No portion of the RA Contract Quantity has been committed by Seller in order to satisfy RAR, LAR, FCR, or analogous capacity obligations in any non-CAISO market;
  - (d) Each RA Unit is connected to the CAISO Controlled Grid, is within the CAISO Control Area, or is under the control of CAISO;
  - (e) The owner or operator of each RA Unit is obligated to comply with Applicable Laws, including the CAISO Tariff, relating to RA Capacity and, as applicable, RAR, LAR and/or FCR;
  - (f) With respect to the Firm RA Capacity provided under this Agreement, Seller shall, and each RA Unit's SC is obligated to, comply with Applicable Laws, including the CAISO Tariff, relating to RA Capacity, and RAR, LAR and FCR;
  - (g) Seller has notified the SC of each RA Unit that Seller has transferred the Firm RA Capacity to Buyer, and the SC is obligated to deliver the Supply Plans in accordance with the CAISO Tariff;
  - (h) Seller has notified the SC of each RA Unit that Seller is obligated to cause each RA Unit's SC to provide to the Buyer, at least five (5) Business Days before the relevant deadline for each RAR Showing, LAR Showing, and/or FCR Showing, as applicable, the Firm RA Capacity of each Unit that is to be submitted in the Supply Plan associated with the Agreement for the applicable period; and
  - (i) Seller has notified each RA Unit's SC that Buyer is entitled to the revenues set forth in Section 4.6 of this Exhibit D, and such SC is obligated to promptly deliver those revenues to Buyer, along with appropriate documentation supporting the amount of those revenues.

## EXHIBIT E

### INSURANCE REQUIREMENTS

1. **Liability Coverages.** Without in any way limiting Seller's liability pursuant to the "Indemnification" section of this Agreement, Seller must maintain in force, during the full term of the Agreement, insurance in the following amounts and coverages and be responsible for its subcontractors, maintaining sufficient limits of the appropriate insurance:

- (a) Workers' Compensation, in statutory amounts, with Employers' Liability Limits not less than \$1,000,000 each accident, injury, or illness; and
- (b) Commercial General Liability Insurance with limits not less than \$1,000,000 each occurrence and \$2,000,000 general aggregate for Bodily Injury and Property Damage, including Contractual Liability, Personal Injury, Products and Completed Operations; and
- (c) Commercial Automobile Liability Insurance with limits not less than \$1,000,000 each occurrence, "Combined Single Limit" for Bodily Injury and Property Damage, including Owned, Non-Owned and Hired auto coverage, as applicable.

3. **Endorsements.**

- (a) Commercial General Liability and Commercial Automobile Liability Insurance policies must be endorsed to provide:
  - (i) Name as Additional Insured, the Buyer and County of San Francisco, its Officers, Agents, and Employees.
  - (ii) That such policies are primary insurance to any other insurance available to the Additional Insureds, with respect to any claims arising out of this Agreement, and that insurance applies separately to each insured against whom claim is made or suit is brought.
- (b) All policies shall be endorsed to provide thirty (30) days' advance written notice to Buyer of cancellation for any reason, intended non-renewal, or reduction in coverages.

4. **Length of Coverage.** Should any of the required insurance be provided under a claims-made form, Seller shall maintain such coverage continuously throughout the term of this Agreement and, without lapse, for a period of three years beyond the expiration of this Agreement, to the effect that, should occurrences during the Term give rise to claims made after expiration of the Agreement, such claims shall be covered by such claims-made policies.

5. **Maintenance of Coverage.** Should any required insurance lapse during the term of this Agreement, requests for payments originating after such lapse shall not be processed until the Buyer receives satisfactory evidence of reinstated coverage as required by this Agreement, effective as of the lapse date. If insurance is not reinstated, Buyer may, at its sole option, terminate this Agreement effective on the date of such lapse of insurance.

6. **Certificates.** Prior to commencement of the Term, Seller shall furnish to Buyer certificates of insurance and additional insured policy endorsements with insurers with ratings comparable to A-, VIII or higher, that are authorized to do business in the State of California, and that are satisfactory to Buyer, in form evidencing all coverages set forth above. Approval of the insurance by Buyer shall not relieve or decrease Seller's liability hereunder.

EXHIBIT F-1

FORM OF LETTER OF CREDIT  
[Issuing Bank Letterhead and Address]  
STANDBY LETTER OF CREDIT NO. XXXXXXXXX

Date: [Insert issue date]

Beneficiary:

Applicant: [Insert name and address of Applicant]

Letter of Credit Amount: [insert Amount]

Expiry Date: [insert expiry date]

Ladies and Gentlemen:

By order of [insert name of Applicant] ("Applicant"), we hereby issue in favor of the City and County of San Francisco, acting by and through its Public Utilities Commission, CleanPowerSF, (the "Beneficiary") our irrevocable standby letter of credit No. [insert number of letter of credit] ("Letter of Credit"), for the account of Applicant, for drawings up to but not to exceed the aggregate sum of U.S. \$ [insert amount in figures followed by (amount in words)] ("Letter of Credit Amount"). This Letter of Credit is available with [insert name of issuing bank, and the city and state in which it is located] by sight payment, at our offices located at the address stated below, effective immediately, and it shall expire at our close of business on [insert expiry date] (the "Expiry Date").

Funds under this Letter of Credit are available to the Beneficiary against presentation of the following documents:

1. Beneficiary's signed and dated sight draft in the form of Exhibit A hereto, referencing this Letter of Credit No. [insert number] and stating the amount of the demand; and
2. One of the following statements signed by an authorized representative or officer of Beneficiary:
  - A. Pursuant to the terms of that certain [insert name of the agreement] (the "Agreement"), dated [insert date of the Agreement], between Beneficiary and [insert name of Seller under the Agreement], Beneficiary is entitled to draw under Letter of Credit No. [insert number] amounts owed by [insert name of Seller under the Agreement] under the Agreement; or
  - B. "Letter of Credit No. [insert number] shall expire in thirty (30) days or less and [insert name of Seller under the Agreement] has not provided replacement security acceptable to Beneficiary.

Special Conditions:

1. Partial and multiple drawings under this Letter of Credit are allowed;
2. All banking charges associated with this Letter of Credit are for the account of the Applicant;
3. This Letter of Credit is not transferable; and
4. The Expiry Date of this Letter of Credit shall be automatically extended without a written amendment for a period of one year and on each successive Expiry Date, unless at least sixty (60) days before the

then current Expiry Date, we notify you by registered mail or courier that we elect not to extend the Expiry Date of this Letter of Credit for such additional period.

We engage with you that drafts drawn under and in compliance with the terms of this Letter of Credit shall be duly honored upon presentation, on or before the Expiry Date (or after the Expiry Date as provided below), at our offices at **[insert issuing bank's address for drawings]**.

All demands for payment shall be made by presentation of originals or copies of documents; or by facsimile transmission of documents to **[insert fax number]**, Attention: **[insert name of issuing bank's receiving department]**, with originals or copies of documents to follow by overnight mail. If presentation is made by facsimile transmission, you may contact us at **[insert phone number]** to confirm our receipt of the transmission. Your failure to seek such a telephone confirmation does not affect our obligation to honor such a presentation.

Our payments against complying presentations under this Letter of Credit shall be made no later than on the sixth (6th) banking day following a complying presentation.

Except as stated herein, this Letter of Credit is not subject to any condition or qualification. It is our individual obligation, which is not contingent upon reimbursement and is not affected by any agreement, document, or instrument between us and the Applicant or between the Beneficiary and the Applicant or any other party.

Except as otherwise specifically stated herein, this Letter of Credit is subject to and governed by the *Uniform Customs and Practice for Documentary Credits, 2007 Revision*, International Chamber of Commerce (ICC) Publication No. 600 (the "UCP 600"); provided that, if this Letter of Credit expires during an interruption of our business as described in Article 36 of the UCP 600, we shall honor drafts presented in compliance with this Letter of Credit within thirty (30) days after the resumption of our business and effect payment accordingly. The law of the State of New York shall apply to any matters not covered by the UCP 600.

For telephone assistance regarding this Letter of Credit, please contact us at **[insert number and any other necessary details]**.

**EXHIBIT F-2**

**SIGHT DRAFT**

**TO: [INSERT NAME AND ADDRESS OF PAYING BANK]**

**AMOUNT: \$**

**DATE:**

**AT SIGHT OF THIS DEMAND PAY TO THE ORDER OF \_\_\_\_\_ THE**

**AMOUNT OF U.S.\$ \_\_\_\_\_ (\_\_\_\_\_ U.S. DOLLARS)**

**DRAWN UNDER [INSERT NAME OF ISSUING BANK] LETTER OF CREDIT NO. XXXXXX.**

**REMIT FUNDS AS FOLLOWS:**

**[INSERT PAYMENT INSTRUCTIONS]**

**DRAWER**

**BY: \_\_\_\_\_  
NAME AND TITLE**

## **WSPP Agreement Changes Effective April 26, 2017**

This version includes all revisions approved by the Federal Energy Regulatory Commission (FERC) in orders issued through June 20, 2017. The most recent revisions are to the List of Members within the Agreement, per the unpublished letter order dated June 20, 2017 (Docket No. ER17-1525-000). The FERC accepted the revisions effective April 26, 2017 for metadata and, for each change in the Member List, the effective date of the change.

This version of the WSPP Agreement is prepared for the convenience of WSPP Members. The WSPP Agreement as filed with the FERC is available at [www.FERC.gov](http://www.FERC.gov) and specifically <http://etariff.ferc.gov/TariffList.aspx>.

This explanatory page is not part of the WSPP Agreement and is not filed with the FERC.

## **WSPP AGREEMENT**

**WSPP INC.**  
**FIRST REVISED RATE SCHEDULE FERC NO. 6**  
Superseding  
Rate Schedule FERC No. 6

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LIST OF MEMBERS

**1. PARTIES:**

The Parties to this WSPP Agreement (hereinafter referred to as "Agreement") are those entities that have executed this Agreement, hereinafter sometimes referred to individually as "Party" and collectively as "Parties," but excluding any such entity that withdraws its participation in the Agreement. An entity shall become a Party on the date specified in Section 16.6.

## 2. RECITALS

- 2.1 Through this Agreement, the WSPP administers a multi-lateral, standardized agreement applicable to capacity and/or energy transactions between members and is available to entities (which qualify for membership under Section 16) throughout the entire continental United States, Canada, and Mexico.
- 2.2 This Agreement serves two functions. First, it sets out the rules applicable to the operation of the WSPP. Second, it sets out the terms for the standardized agreement used for capacity and/or energy transactions between members.
- 2.3 This Agreement facilitates physical transactions in capacity and/or energy under a FERC accepted or approved rate schedule (this Rate Schedule FERC No. 6).
- 2.4 Through the standardization of terms for transactions in capacity and/or energy which facilitates such transactions, the public interest has been and will continue to be served.

**3. AGREEMENT:**

In consideration of the mutual covenants and promises herein set forth, the Parties agree as follows:

4. **DEFINITIONS:**

The following terms, when used herein with initial capitalization, whether in the singular or in the plural, shall have the meanings specified:

Agreement: This WSPP Agreement, including the Service Schedules and Exhibits attached hereto, as amended; provided, however, that Confirmation(s) are not included within this definition.

Administrative Committee: A sub-committee of the Executive Committee in accordance with Section 8.1.2.

Broker: An entity or person that arranges trades or brings together Purchasers and Sellers without taking title to the power.

Business Day(s): Any day other than a Saturday or Sunday or a national (United States or Canadian, whichever is applicable) holiday. United States holidays shall be holidays observed by Federal Reserve member banks in New York City. Where both the Seller and the Purchaser have their principal place of business in the United States, Canadian holidays shall not apply. Similarly, where both the Seller and the Purchaser have their principal places of business in Canada, Canadian holidays shall apply and United States holidays shall not apply. In situations where one Party has its principal place of business within the United States and the other Party's principal place of business is within Canada, both United States and Canadian holidays shall apply.

California ISO: The California Independent System Operator Corporation or any successor organization.

Confirmation(s): The confirmations for transactions developed and made effective in accordance with Section 32 or Electronic Platform Confirmations.

Contract Price: The price agreed to between the Seller and the Purchaser for a transaction under the Agreement and Confirmation.

Contract Quantity: The amount of capacity and/or energy to be supplied for a transaction under the Agreement.

Control Area: An electric system capable of regulating its generation in order to maintain its interchange schedule with other electric systems and to contribute its frequency bias obligation to the interconnection as specified in the North American Electric Reliability Council (NERC) Operating Guidelines.

Costs: As defined in Section 22.3 of this Agreement.

Damages Settlement Transaction: A transaction where, after non-performance under a Confirmation, the Parties enter into a second transaction for the purpose of finally settling damages incurred by the Performing Party due to non-performance of such Confirmation.

Dealer: An entity or person that buys or sells power and takes title to the power at some point.

Defaulting Party: As defined in Section 22.1 of this Agreement.

Determination Period: As defined in Section 38.2 of this Agreement.

Documentary Writing: A document which is physically delivered by courier or U.S. mail, or a copy of which is transmitted by telefacsimile or other electronic means.

Economy Energy Service: Non-firm energy transaction whereby the Seller has agreed to sell or exchange and the Purchaser has agreed to buy or exchange energy that is

subject to immediate interruption upon notification, in accordance with the Agreement, including Service Schedule A, and any applicable Confirmation.

Electric Utility: An entity or lawful association which (i) is a public utility, Independent Power Producer, or Power Marketer regulated under applicable state law or the Federal Power Act, or (ii) is exempted from such regulation under the Federal Power Act because it is the United States, a State or any political subdivision thereof or an agency of any of the foregoing, or a Rural Utilities Service cooperative, or (iii) is a public utility, Independent Power Producer, or Power Marketer located in Canada or Mexico that is similarly regulated.

Electronic Platform Confirmation: agreed terms and conditions of a transaction, which agreement (a) was made through electronic entry of information and terms on, and in a manner that complies with the procedures of, the applicable electronic trading platform or exchange, (b) includes, at a minimum, the Standard Confirmation Provisions, and (c) is available to either Party for retrieval from the applicable electronic trading platform or exchange in printable or electronic form.

Electronic Writing:

- (1) Recorded oral conversation; or
- (2) electronic communications, including but not limited to e-mail, if the Parties to the transaction use such method to create an electronic writing for the Confirmation for such transaction and, except with respect to e-mail, specifically agree to the method of electronic communication.



Electronic Writings shall not include the transmittal of a copy of a document by electronic means, which is considered a Documentary Writing.

ERCOT: Electric Reliability Council of Texas, Inc., and any successor organization.

Event of Default: As defined in Section 22.1 of this Agreement.

Executive Committee: The committee established pursuant to Section 8 of this Agreement.

FERC: The Federal Energy Regulatory Commission or its regulatory successor.

Firm Capacity/Energy Sale or Exchange Service: Firm capacity and/or energy transaction whereby the Seller has agreed to sell or exchange and the Purchaser has agreed to buy or exchange for a specified period available capacity with or without associated energy which may include a Physically-Settled Option and a capacity transaction in accordance with the Agreement, including Service Schedule C, and any applicable Confirmation.

First Party: As defined in Section 27 of this Agreement.

Floating Price: As defined in Section 38.1 of this Agreement.

Gains: As defined in Section 22.3 of this Agreement.

Guarantee Agreement: An agreement providing a guarantee issued by a parent company or another entity guaranteeing responsibility for obligations arising under this Agreement and Confirmation. A sample form of Guarantee Agreement is provided in Exhibit B.

Guarantor: The entity providing a guarantee pursuant to a Guarantee Agreement.

Hub: An electronic communication center that functions as a central point to electronically receive and assemble data for offers to buy or sell power or transmission service from each Party and make that data electronically available concurrently to all Parties.

Incremental Cost: The forecasted expense incurred by the Seller in providing an additional increment of energy or capacity during a given hour.

Independent Power Producer: An entity which is a non-traditional public utility that produces and sells electricity but which does not have a retail service franchise.

Letter of Credit: An irrevocable, transferable, standby letter of credit, issued by an issuer acceptable to the Party requiring the Letter of Credit.

Losses: As defined in Section 22.3 of this Agreement.

Market Disruption Event: As defined in Section 38.2 of this Agreement.

NERC: North American Electric Reliability Council or any successor organization.

Non-Defaulting Party: As defined in Section 22.1(a) of this Agreement.

Non-Performing Party: As defined in Section 21.3(a) of this Agreement.

Non-Standard Confirmation Provisions: Provisions other than Standard Confirmation Provisions.

NYMEX: New York Mercantile Exchange and any successor organization.

Operating Agent: An agent of the WSPP as may be designated by the Executive Committee from time to time.

Operating Committee: That committee established pursuant to Section 8 of this Agreement.

Party or Parties: As defined in Section 1 of this Agreement.

Performing Party: As defined in Section 21.3(a) of this Agreement.

Power Marketer: An entity which buys, sells, and takes title to electric energy, transmission and/or other services from traditional utilities and other suppliers.

Physically-Settled Option: Includes (i) a call option which is the right, but not the obligation, to buy an underlying power product as defined under Service Schedules B or C according to the price and exercise terms set forth in the Confirmation; and (ii) a put option which is the right, but not the obligation, to sell an underlying power product as defined under Service Schedules B or C according to the price and exercise terms set forth in the Confirmation.

Premium: The amount paid by the Purchaser of a Physically-Settled Option to the Seller of such option by the date agreed to by the Parties in the Confirmation.

Present Value Rate: As defined in Section 22.3(b) of this Agreement.

Purchaser: Any Party which agrees to buy or receive from one or more of the other Parties any service pursuant to the Agreement and any applicable Confirmation.

Qualifying Facility: A facility which is a qualifying small power production facility or a qualifying cogeneration facility as these terms are defined in Federal Power Act Sections 3(17)(A), 3(17)(C), 3(18)(A), and 3(18)(B); which meets the requirements set forth in 18 C.F.R. §§ 292.203-292.209; or a facility in Canada or Mexico that complies with similar requirements.

Replacement Price: The price at which the Purchaser, acting in a commercially reasonable manner, effects a purchase of substitute capacity and/or energy in place of the capacity and/or energy not delivered (for energy) or made available (for capacity only) by the Seller or, absent such a purchase, the market price for

such quantity of capacity and/or energy, as determined by the Purchaser in a commercially reasonable manner, at the delivery point specified for the transaction in the Confirmation.

Resale Price: The price at which the Seller, acting in a commercially reasonable manner, effects a resale of the capacity and/or energy not received by the Purchaser or, absent such a resale, the market price for such quantity of capacity and/or energy, as determined by the Seller in a commercially reasonable manner at the delivery point specified for the transaction in a Confirmation.

Retail Entity: A retail aggregator or supplier or retail customer; provided, however, only those Retail Entities eligible for transmission service under the FERC's pro forma open access transmission tariff are eligible to become members of the WSPP.

Second Party: As defined in Section 27 of this Agreement.

Seller: Any Party which agrees to sell or provide to one or more of the other Parties any service pursuant to the Agreement and the applicable Confirmation.

Service Schedule: A schedule of services established pursuant to Section 6 of this Agreement on file with FERC as part of this Agreement.

Standard Confirmation Provisions: Provisions setting forth: Seller, Purchaser, period of delivery, schedule, delivery rate, delivery points, type of service (e.g. Service Schedule A, B, C or other), contract quantity, price, transmission path (if any), date, and certain additional information for physically settled options (option type, option style, exercise date or period, premium, premium payout date, and method for providing notice of exercise).

Successor in Operation: The successor entity which takes over the wholesale electric trading operations of the first entity either through a merger or restructuring. A Successor in Operation shall not include an entity which merely acquires power sales contracts from the first entity either through a purchase or other means without taking over the wholesale electric trading operations of the first entity.

Terminated Transaction: As defined in Section 22.2 of this Agreement.

Termination Payment: As defined in Section 22.2 of this Agreement.

Trading Day: As defined in Section 38.2 of this Agreement.

Uncontrollable Forces: As defined in Section 10 of this Agreement or in a Confirmation.

Unit Commitment Service: A capacity and/or associated scheduled energy transaction or a Physically-Settled Option under which the Seller has agreed to sell and the Purchaser has agreed to buy from a specified unit(s) for a specified period, in accordance with the Agreement, including Service Schedule B, and any applicable Confirmation.

WSPP: WSPP Inc., a corporation organized in 1995 and duly existing under the Utah Revised Nonprofit Corporation Act.

WSPP Default Transmission Tariff: The transmission tariff filed on behalf of WSPP members with FERC as it may be amended from time to time.

WSPP Homepage: WSPP's internet web site, [www.wspp.org](http://www.wspp.org).

**5. TERM, TERMINATION AND WITHDRAWAL:**

- 5.1 This Agreement shall remain in effect until the Executive Committee, consistent with the voting provisions of Section 8.3, votes to terminate this Agreement and FERC accepts that termination, or FERC otherwise terminates the Agreement.
- 5.2 Any Party may withdraw its participation as a member of the WSPP and as a Party to this Agreement by providing thirty (30) days prior written notice to the Operating Agent and to the WSPP Homepage, and to all of its counterparties to outstanding transactions. As of the effective date of any withdrawal, the withdrawing Party shall have no further rights or obligations under this Agreement or as a member of the WSPP, except with respect to each outstanding Confirmation, all outstanding rights and obligations arising under any such Confirmation and this Agreement shall remain in full force and effect as if the withdrawal had not occurred. No Party shall oppose, before any court or regulatory agencies having jurisdiction, any other Party's withdrawal as provided in this Section.
- 5.3 Except as provided for in Section 5.2, after termination, or withdrawal with respect to the withdrawing Party, all rights to services provided under this Agreement shall cease, and no Party shall claim or assert any continuing right to such services thereunder. Except as provided in Section 5.2, no Party shall be required to provide services based in whole or in part on the existence of this Agreement or on the provision of services under this Agreement beyond the termination date, or date of withdrawal with respect to the withdrawing Party. If the Parties have entered into a master confirmation agreement only for WSPP

transactions as that term is defined in Section 32.10, the withdrawing Party shall have no further rights under that master confirmation agreement except for transactions that were outstanding at the time of the withdrawal.

- 5.4 The Parties subject to FERC jurisdiction under the Federal Power Act shall have the right to terminate their participation as a Member of the WSPP and as Party to this Agreement and any Confirmation without the necessity of filing with or approval by FERC, provided that such Parties comply with the requirements of Section 5.2.

**6. SERVICE SCHEDULES AND WSPP DEFAULT TRANSMISSION TARIFF:**

6.1 The Parties contemplate that they may, from time to time, add or remove Service Schedules under this Agreement. The attached Service Schedules A through E for Economy Energy Service, Unit Commitment Service, Firm Capacity/Energy Sale or Exchange Service, Operating Reserve – Spinning and Operating Reserve – Supplemental, and Energy Imbalance and Generator Imbalance Power, and Service Schedule R for Renewable Energy Certificate Transactions With And Without Energy, are incorporated into and made a part of this Agreement. Nothing contained herein shall be construed as affecting in any way the right of the Parties to jointly make application to FERC for a change in the rates and charges, classification, service, terms, or conditions affecting WSPP transactions under Section 205 of the Federal Power Act and pursuant to FERC rules and regulations promulgated thereunder. Additional Service Schedules or amendments to existing Service Schedules, if any, shall be adopted only by amendment of this Agreement approved by the Executive Committee pursuant to Section 8.3 and shall become effective on the effective date allowed or accepted by FERC consistent with Section 39.

6.2 **[RESERVED]**

6.3 When the WSPP Default Transmission Tariff applies as specified in the preamble to such Default Transmission Tariff, Transmission Service under it shall be available both to Parties and non-Parties under this Agreement; provided, however, each Party or non-Party must be an eligible customer under the WSPP Default Transmission Tariff in order to receive service.



**7. ADMINISTRATION:**

- 7.1 The WSPP shall perform the administrative tasks necessary and appropriate to implement this Agreement. All authority to direct, manage and administer the WSPP shall reside in the Executive Committee. All duties assigned under this Agreement, or otherwise, to the Operating Committee, sub-committees, officers, Administrative Committee, or Operating Agent, are delegated powers of the Executive Committee and are subject to the Executive Committee's direction and control. The WSPP may engage the services of an Operating Agent, from time to time, to perform tasks in furtherance of this Agreement.
- 7.2 At least sixty (60) days prior to each calendar year that this Agreement is in effect, the Administrative Committee shall submit a budget for said year of operation to the Operating Committee for review. The proposed budget shall then be submitted, with the Operating Committee's recommendations, to the Executive Committee. The Executive Committee may approve the budget as submitted or with revisions. The Administrative Committee, Operating Committee, and Executive Committee shall address any appropriate revisions of the budget in the same manner.
- 7.3 The WSPP shall, as necessary, bill the Parties for costs incurred under this Agreement on an estimated basis reasonably in advance of when due, and such billings shall be paid by the Parties when due. Such billings shall be adjusted in the following month(s) to reflect recorded costs. Billing and payment of WSPP costs shall otherwise be implemented in accordance with the provisions of Section 9.

- 7.4 The WSPP shall maintain the WSPP Homepage and, as it deems appropriate, may engage a contractor for this purpose.
- 7.5 Each Party shall maintain a link to the WSPP Homepage and shall be responsible for expenses related thereto.
- 7.6 The WSPP, at reasonable times and places, shall make available its books of account, and records and documentation supporting expenditures under this Agreement, for the inspection of any Party for a period of time not to exceed two (2) years from the time such expenditures were incurred. A Party requesting review of the WSPP's records shall give the WSPP sufficient notice of its intent, but in no event less than thirty (30) days. The requesting Party may perform this review using personnel from its own staff or designate a certified public accounting firm for the purpose of this review. All costs incurred to perform this review shall be at the requesting Party's own expense. The Party performing the review shall not voluntarily release the WSPP's records or disclose any information contained therein to any third party unless the written consent of the WSPP and the Executive Committee has been obtained, except as required by law.
- 7.7 Upon the termination of this Agreement, in accordance with applicable law, the WSPP shall dispose of any and all of its assets and wind up its affairs as the Executive Committee may direct.

**8. EXECUTIVE AND OPERATING COMMITTEES:**

As a means of securing effective and timely cooperation within the activities hereunder and as a means of dealing on a prompt and orderly basis with various problems which may arise in connection with system coordination and operation under changing conditions, the Parties hereby establish an Executive Committee and an Operating Committee.

**8.1 Executive Committee:**

The Executive Committee shall consist of one representative and an alternate from each Party designated pursuant to Section 8.5 herein. The responsibilities of the Executive Committee are as follows:

8.1.1 To establish and amend bylaws of the WSPP consistent with this Agreement and to serve as the Board of Directors of the WSPP in accordance with applicable law.

8.1.2 To establish standing or ad hoc sub-committees as it may from time to time deem necessary or appropriate and appoint or elect members thereto. Such sub-committees shall include an Administrative Committee, as a standing committee, to administer the affairs of the WSPP as the Executive Committee may direct or approve. The Administrative Committee shall be comprised of the Chairman, Vice-Chairman, Secretary and Treasurer of the WSPP and the Chairman, and Vice-Chairman, and Secretary of the Operating Committee.

8.1.3 To review at least annually the service activities hereunder to ensure that such activities are consistent with the spirit and intent of this Agreement.

- 8.1.4 To review any unresolved issues which may arise hereunder and endeavor to resolve the issues.
- 8.1.5 To review and approve the WSPP's annual budget under this Agreement, and any revision thereto, in accordance with Section 7.2 of this Agreement or otherwise as the Executive Committee deems necessary or appropriate.
- 8.1.6 To amend this Agreement, from time to time, provided that no such amendment or restatement shall be effective unless approved or accepted by the FERC and subject to terms and conditions of such approval or acceptance. The effectiveness of any amendment also shall be consistent with Section 39.
- 8.1.7 To review and act on the application of an entity to become a Party to this Agreement, or to delegate such authority as the Executive Committee deems appropriate.
- 8.1.8 To do such other things and carry out such duties as specifically required or authorized by this Agreement.
- 8.1.9 To notify any Party of the rescission of its interest in this Agreement due to its failure to continue to meet the requirements of Section 16.1, or to delegate such authority to the Chairman of the Executive Committee, the Chairman of the Operating Committee, or the Administrative Committee.
- 8.1.10 To arrange for legal representation of the WSPP.

8.2 Operating Committee:

The Operating Committee shall consist of one representative and an alternate from each Party designated pursuant to Section 8.5. The responsibilities of the Operating Committee are as follows:

- 8.2.1 To establish, review, approve, or modify procedures and standard practices, consistent with the provisions hereof, for the guidance of operating employees in the Parties' electric systems as to matters affecting transactions under this Agreement.
- 8.2.2 To submit to the Executive Committee any proposed revisions to the Service Schedules or proposed additional Service Schedules.
- 8.2.3 To submit to the Executive Committee proposed amendments to this Agreement, provided that the Operating Committee shall have no authority to amend this Agreement, and further provided that the Executive Committee may amend this Agreement under Section 8.1.6 without having first received recommendations from the Operating Committee.
- 8.2.4 To establish, review, approve, or modify any scheduling or operating procedures required in connection with transactions under this Agreement.
- 8.2.5 To review and make recommendations to the Executive Committee for approval of the annual budget of the WSPP under this Agreement, including any proposed revisions thereto.
- 8.2.6 To review and recommend as necessary the types and arrangement of equipment for intersystem communication facilities to enhance transactions and benefits under this Agreement.
- 8.2.7 To monitor the administration and costs of the WSPP Homepage.
- 8.2.8 If the Executive Committee so directs, to review new member applications for membership in the WSPP under this Agreement and make

recommendations on said applications to the Executive Committee, or to delegate such authority as the Operating Committee deems appropriate.

8.2.9 To establish standing or ad hoc sub-committees and appoint or elect members of the Operating Committee thereto, provided that such sub-committees shall make recommendations to the Operating Committee and shall not be authorized to take any action or exercise any power reserved to the Operating Committee. Each sub-committee may elect a chairman, vice chairman, and secretary as it deems appropriate.

8.2.10 To do such other things and carry out such duties as specifically required or authorized by this Agreement or as directed by the Executive Committee; provided, however, that the Operating Committee shall have no authority to amend this Agreement.

8.3 All matters which require Operating Committee or Executive Committee approval as provided in this Agreement shall be by no less than ninety percent (90%) affirmative agreement of the committee members present or voting by proxy.

8.4 Unless otherwise agreed by all committee members of the Executive Committee or Operating Committee, as applicable, the Chairman of the Executive Committee and the Chairman of the Operating Committee shall cause all members of the applicable committee to receive notice of a committee meeting at least ten (10) Business Days prior to the date of the meeting. Such notice shall include an agenda of matters to be discussed and voted on at the meeting. All material issues to be submitted to a vote of the committee shall appear on the agenda.

- 8.5 In accordance with Section 16.5.1, each Party shall give notice to the WSPP of the name of its designated representative and alternate representative (to act in the absence of the designated representative) on each of the Executive Committee and Operating Committee, and of any changes thereto, and WSPP shall publish a listing of all such representatives on the WSPP Homepage. Each Party's designated representatives shall be authorized to act on its behalf with respect to votes taken of members of each committee and other activities of the committee.
- 8.6 The Executive Committee shall meet no less than once annually and otherwise as determined by its Chairman in his discretion. The Operating Committee shall meet as necessary, as determined by its Chairman in his discretion. A Chairman shall call a meeting of such committee upon the written request of not less than ten (10) members of the applicable committee.
- 8.7 The Executive Committee shall elect a Chairman, Vice-Chairman, Secretary and Treasurer. The Operating Committee shall elect a Chairman, Vice-Chairman, and Secretary. These officers shall serve terms of two-years duration, which terms shall commence on January 1 of the year following the election and expire on December 31 of the subsequent year, provided, that despite the expiration of an officer's term, the officer shall continue to serve until the officer's successor is elected and commences to serve, and further provided that with or without cause, the Executive Committee or Operating Committee, as applicable, may elect a substitute officer prior to the expiration of a term.
- 8.7.1 The Chairman of the Executive Committee shall be the Chairman of the WSPP. The Chairman shall preside over meetings of the Executive

Committee and, when the Executive Committee is not in session, exercise day to day management and control of the business and affairs of the WSPP, subject at all times to this Agreement and the direction of the Executive Committee.

8.7.2 The Vice-Chairman of the Executive Committee shall be the Vice-Chairman of the WSPP. The Vice-Chairman, in the absence or disability of the Chairman, shall exercise the powers and perform the duties of the Chairman and such other duties as the Executive Committee or the Chairman may prescribe, subject at all times to this Agreement and the direction of the Executive Committee.

8.7.3 The Secretary of the Executive Committee shall be the Secretary of the WSPP. The Secretary, or his designee, shall record minutes of meetings and actions of the Executive Committee, perform the customary duties of a secretary of a non-profit corporation, and attend to the giving and serving of all notices required by law or under this Agreement as the Chairman may direct.

8.7.4 The Treasurer of the Executive Committee shall be the Treasurer of the WSPP. The Treasurer shall have custody of all funds, securities, and evidences of indebtedness of the Corporation. The Treasurer shall receive and give receipts for moneys paid in on account of the Corporation and shall pay out of the funds on hand any bills, payrolls and other just debts of the Corporation of whatever nature upon maturity. The Treasurer shall maintain full and accurate accounts of all moneys received and paid out on account of



the Corporation. The Treasurer shall deposit all moneys and other valuables in the name and to the credit of the Corporation in such depositories as may be designated by the Executive Committee. The Treasurer shall adhere to budgets determined by the Executive Committee, including the annual budget under section 8.1.4 of this Agreement, and shall perform such other duties as are customary for a treasurer of a non-profit corporation.

8.7.5. The Chairman of the Operating Committee shall preside over Operating Committee meetings. The Vice Chairman of the Operating Committee shall serve in the absence of the Chairman and perform such other duties as the Operating Committee may assign. The Secretary of the Operating Committee, or his designee, shall record minutes of meetings and actions of the Operating Committee, and shall give notice of meetings as the Chairman may direct.

**9. PAYMENTS:**

- 9.1 The accounting and billing period for transactions under this Agreement shall be one (1) calendar month. Bills sent to any Party shall be sent to the appropriate billing address as set forth on the WSPP homepage or as otherwise specified by such Party.
- 9.2 Payments for amounts billed under this Agreement and any Confirmation shall be received by the Party to be paid on the 20th day of the month in which the invoice was received or the tenth (10) day after receipt of the bill, whichever is later. Notwithstanding the foregoing, Premiums shall be paid within three (3) Business Days of receipt of the invoice. Payment shall be made at the location designated by the Party to which payment is due. Payment shall be considered received when payment is received by the Party to which Payment is due at the location designated by that Party. If the due date falls on a non-Business Day of either Party, then the payment shall be due on the next following Business Day.
- 9.3 Amounts not paid on or before the due date shall be payable with interest calculated daily, at a rate equal to 200 basis points above the per annum Prime Rate reported daily in the Wall Street Journal for the period beginning on the day after the due date and ending on the day of payment, provided that such interest shall not exceed the amount permitted by law.
- 9.4 In order to dispute a bill in whole or in part, a Party must provide written notice of the dispute to the other Party to the transaction. Such written notice shall specify the amount in dispute and state the basis for the dispute. In case any portion of any bill is in dispute, the entire bill shall be paid when due. Any excess amount

of bills which, through inadvertent errors or as a result of a dispute, may have been overpaid shall be returned by the owing Party upon determination of the correct amount, with interest calculated in the manner set forth in Section 9.3. A Party shall have the right to dispute the accuracy of any bill or payment only for a period of two (2) years from the date on which the bill was initially delivered.

9.5 If a Party's records reveal that a bill was not delivered, then the Party may deliver to the appropriate Party a bill within two (2) years from the date on which the bill would have been delivered under Section 9.1 of this Agreement. The right to payment is waived with respect to any amounts not billed within such two (2) year period.

9.6 Each Party, or any third party representative of a Party, shall keep complete and accurate records, and shall maintain such data as may be necessary for the purpose of ascertaining the accuracy of all relevant data, estimates, or statements of charges submitted hereunder for a period of two (2) years from the date the bill was delivered under this Agreement and/or Confirmation.

Within a two (2) year period from the date on which the bill was initially delivered, any Party to the applicable transaction may request in writing copies of the records of the other Party for that transaction to the extent reasonably necessary to verify the accuracy of any statement or charge. The Party from which documents or data has been requested shall provide all reasonably requested documents and data within a reasonable time period.

**10. UNCONTROLLABLE FORCES:**

No Party shall be considered to be in breach of this Agreement or any applicable Confirmation to the extent that a failure to perform its obligations under this Agreement or any such Confirmation is due to an Uncontrollable Force. The term "Uncontrollable Force" means an event or circumstance which prevents one Party from performing its obligations under one or more transactions, which event or circumstance is not within the reasonable control of, or the result of the negligence of, the claiming Party, and which by the exercise of due diligence the claiming Party is unable to avoid, cause to be avoided, or overcome. So long as the requirements of the preceding sentence are met, an "Uncontrollable Force" may include and is not restricted to flood, drought, earthquake, storm, fire, lightning, epidemic, war, riot, act of terrorism, civil disturbance or disobedience, labor dispute, labor or material shortage, sabotage, restraint by court order or public authority, and action or nonaction by, or failure to obtain the necessary authorizations or approvals from, any governmental agency or authority.

The following shall not be considered "Uncontrollable Forces": (i) Seller's cost of obtaining capacity and/or energy; or (ii) Purchaser's inability due to the price of the capacity and/or energy, to use or resell such capacity and/or energy. No Party shall, however, be relieved of liability for failure of performance to the extent that such failure is due to causes arising out of its own negligence or due to removable or remediable causes which it fails to remove or remedy within a reasonable time period. Nothing contained herein shall be construed to require a Party to settle any strike or labor dispute in which it may be involved. Any Party rendered unable to fulfill any of its obligations by reason of an Uncontrollable Force shall give prompt notice of such fact and shall

exercise due diligence, as provided above, to remove such inability within a reasonable time period. If oral notice is provided, it shall be promptly followed by written notice.

Where the entity providing transmission services for transactions under this Agreement and Confirmation interrupts such transmission service, the interruption in transmission service shall be considered an Uncontrollable Force under this Section 10 only in the following two sets of circumstances:

- (1) An interruption in transmission service shall be considered an Uncontrollable Force if (a) the Parties agreed on a transmission path for that transaction in the Confirmation (b) firm transmission involving that transmission path was obtained pursuant to a transmission tariff or contract to effectuate the transaction under this Agreement and Confirmation, and (c) the entity providing transmission service curtailed or interrupted such firm transmission pursuant to the applicable transmission tariff or contract. There shall be no due diligence obligation associated with interruptions under this subparagraph (1).
- (2) If the Parties did not agree on the transmission path for a transaction in the Confirmation, an interruption in transmission service shall be considered an Uncontrollable Force only if (a) the Party contracting for transmission services shall have made arrangements with the entity providing transmission service for firm transmission to effectuate the transaction under the Agreement and Confirmation, (b) the entity providing transmission service curtailed or interrupted such transmission service, and (c) the Party which contracted for such firm transmission services could not obtain alternate energy at the delivery point,

alternate transmission services, or alternate means of delivering energy after exercising due diligence.

No Party shall be relieved by operation of this Section 10 of any liability to pay for power delivered to the Purchaser or to make payments then due or which the Party is obligated to make with respect to performance which occurred prior to the Uncontrollable Force.

**11. WAIVERS:**

Any waiver at any time by any Party of its rights with respect to a default under this Agreement or any Confirmation, or any other matter under this Agreement, shall not be deemed a waiver with respect to any subsequent default of the same or any other matter.

**12. NOTICES:**

- 12.1 Except for the oral notice provided for in Section 10 of this Agreement, any formal notice, demand or request provided for in this Agreement shall be in writing and shall be deemed properly served, given or made if delivered in person, or sent by either registered or certified mail (postage prepaid), prepaid telegram, fax, or overnight delivery (with record of receipt).
- 12.2 Notices and requests of a routine nature applicable to delivery or receipt of capacity and/or energy shall be given in such manner as the Parties to a transaction shall prescribe in a Confirmation or otherwise; provided, however, if the Parties have not prescribed a method of providing such routine notices, then the procedures in Section 12.1 shall apply.



**13. EFFECT OF APPROVALS:**

- 13.1 This Agreement and all Confirmations are subject to valid laws, orders, rules and regulations of duly constituted authorities having jurisdiction. Nothing contained in this Agreement or any Confirmation shall give FERC jurisdiction over those Parties not otherwise subject to such jurisdiction or be construed as a grant of jurisdiction over any Party by any state or federal agency not otherwise having jurisdiction by law.
- 13.2 Nothing in this Agreement or any Confirmation is intended to restrict the authority of the Bonneville Power Administration (BPA) pursuant to applicable statutory authority to use its existing wholesale power and transmission rates or to adopt new rates, rate schedules, or general rate schedule provisions for application under this Agreement and obtain interim or final approval of those rates from FERC pursuant to Section 7 of the Pacific Northwest Electric Power Planning and Conservation Act, 16 U.S.C. Sec. 839e, provided such rates do not exceed the maximum rates in the applicable Service Schedule and are consistent with the terms and conditions of said Service Schedule.
- 13.3 Nothing contained in this Agreement or any Confirmation shall be construed to establish any precedent for any other agreement or to grant any rights to or impose any obligations on any Party beyond the scope and term of this Agreement or any Confirmation.

**14. TRANSFER OF INTEREST IN AGREEMENT:**

No Party shall voluntarily transfer its membership in the WSPP under this Agreement without the written consent and approval of all other Parties except to a Successor in Operation of such Party. With regard to the transfer of the rights and obligations of any Party associated with transactions under this Agreement and Confirmation(s), neither Party to such transactions may assign such rights or obligations unless (a) the other Party provides its prior written consent which shall not be unreasonably withheld; or (b) the assignment is to a Successor in Operation which provides reasonable creditworthiness assurances (see Section 27 for examples of such assurances) if required by the non-assigning Party based upon its reasonably exercised discretion. Any successor or assignee of the rights of any Party, whether by voluntary transfer, judicial or foreclosure sale or otherwise, shall be subject to all the provisions and conditions of this Agreement and Confirmation(s) (where applicable) to the same extent as though such successor or assignee were the original Party under this Agreement or the Confirmation(s), and no assignment or transfer of any rights under this Agreement or any Confirmation(s) shall be effective unless and until the assignee or transferee agrees in writing to assume all of the obligations of the assignor or transferor and to be bound by all of the provisions and conditions of this Agreement and any Confirmation(s) (where applicable). The execution of a mortgage or trust deed or a judicial or foreclosure sale made thereunder shall not be deemed a voluntary transfer within the meaning of this Section 14.

**15. SEVERABILITY:**

In the event that any of the terms, covenants or conditions of this Agreement or any Confirmation, or the application of any such term, covenant or condition, shall be held invalid as to any person or circumstance by any court, regulatory agency, or other regulatory body having jurisdiction, all other terms, covenants or conditions of this Agreement and the Confirmation and their application shall not be affected thereby, but shall remain in force and effect unless a court, regulatory agency, or other regulatory body holds that the provisions are not separable from all other provisions of this Agreement or such Confirmation(s).

**16. MEMBERSHIP:**

- 16.1 Any Electric Utility, Retail Entity or Qualifying Facility may become a Party to this Agreement. The Executive Committee shall notify such Electric Utility, Retail Entity or Qualifying Facility of its decision within sixty (60) days of a request to become a Party to this Agreement, and any acceptable entity shall become a Party hereto by the execution of this Agreement or a counterpart hereof, payment of costs pursuant to Section 16.4, and concluding any necessary acceptance or approval referred to in Section 13. Any such Party, if it is subject to the ratemaking jurisdiction of FERC, shall be responsible for any FERC filing necessary for it to implement its performance under this Agreement.
- 16.2 Each Party shall continue to meet the requirements of Section 16.1 in order to remain a Party to this Agreement
- 16.3 Being a Party to this Agreement shall not serve as a substitute for contractual arrangements that may be needed between any Party which operates a Control Area and any other Party which operates within that Control Area.
- 16.4 Any entity that becomes a Party to this Agreement which was not a party to the experimental Western Systems Power Pool Agreement shall pay a one time fee of \$25,000 under this Agreement in recognition of prior efforts and costs incurred by the parties to the experimental Western Systems Power Pool Agreement, which efforts greatly facilitated development of this Agreement. Such fee shall be credited to future costs of the WSPP incurred hereunder.

16.5 In addition to requirements set forth elsewhere in this Agreement imposed on Parties as part of their membership in the WSPP, each Party shall abide by the following requirements:

16.5.1 Each Party shall maintain updated information regarding its Executive Committee and Operating Committee representatives on the WSPP Homepage and shall submit changes within a reasonable time period.

16.5.2 With regard to disputes involving transactions under this Agreement or other agreements, no Party shall seek to conduct discovery of the WSPP or issue or seek to obtain the issuance of any subpoena to the WSPP or WSPP officers acting in their capacities as officers of the WSPP or of the WSPP's attorneys or consultants with regard to their work for the WSPP or their opinions regarding the construction or interpretation of any clause of the Agreement, provided that the foregoing prohibition shall not apply in proceedings brought against the WSPP. In the event a Party seeks to compel discovery or testimony in violation of this Section, that Party shall be deemed to have consented to the quashing of the subpoena or other process providing therefor. Notwithstanding any other provision in this Agreement, a Party that seeks to conduct discovery or issue or seek to obtain the issuance of any subpoena in breach of this provision shall compensate the WSPP and its officers, attorneys, and consultants, as applicable, for all out-of-pocket costs incurred.

16.6 An entity shall become a Party to this Agreement and a member of the WSPP upon satisfaction of the requirements in this Section 16 and on the date allowed

by FERC if it is a FERC public utility or upon the date of satisfaction of the requirements in this Section 16 if it is not a FERC public utility.

**17. RELATIONSHIP OF PARTIES:**

17.1 Nothing contained in this Agreement or in any Confirmation shall be construed to create an association, joint venture, trust, or partnership, or agency relationship between or among the Parties, or to impose a trust or partnership covenant, obligation, or liability on or with regard to any of the Parties. Each Party shall be individually responsible for its own covenants, obligations, and liabilities under this Agreement and under any applicable Confirmation.

17.2 All rights and obligations of the Parties under this Agreement are several and are not joint.

**18. NO DEDICATION OF FACILITIES:**

Any undertaking by one Party to another Party under any provision of this Agreement shall not constitute the dedication of the electric system or any portion thereof of the undertaking Party to the public or to the other Party, and it is understood and agreed that any such undertaking under any provision of this Agreement by a Party shall cease upon the termination of such Party's obligations under this Agreement.



**19. NO RETAIL SERVICES:**

Nothing contained in this Agreement shall grant any rights to or obligate any Party to provide any services hereunder directly to or for retail customers of any Party.

**20. THIRD PARTY BENEFICIARIES:**

This Agreement shall not be construed to create rights, in, or to grant remedies to, any third party as a beneficiary of this Agreement or of any duty, obligation or undertaking established herein except as provided for in Section 14.

**21. LIABILITY AND DAMAGES:**

21.1 This Agreement contains express remedies and measures of damages in Sections 21.3 and 22 for non-performance or default. This Agreement also contains additional remedies to enforce payment of monies due and to enforce terms of the Agreement and applicable Confirmations in Section 21.2.

**ALL OTHER DAMAGES OR REMEDIES ARE HEREBY WAIVED.**

Therefore, except as provided in Sections 21.3 and 22, no Party or its directors, members of its governing bodies, officers or employees shall be liable to any other Party or Parties for any loss or damage to property, loss of earnings, or revenues, personal injury, or any other direct, indirect, or consequential damages or injury, or punitive damages, which may occur or result from the performance or non-performance of this Agreement (including any applicable Confirmation), including any negligence arising hereunder. Any liability or damages incurred by an officer or employee of a Federal agency or by that agency that would result from the operation of this provision shall not be inconsistent with Federal law.

21.2 Any Party due monies under this Agreement, the amounts of which are not in dispute or if disputed have been the subject of a decision awarding monies, (i) shall have the right to seek payment of such monies in any forum having competent jurisdiction and (ii) shall possess the right to seek relief directly from that forum without first utilizing the mediation or arbitration provisions of this Agreement and without exercising termination and liquidation rights under Section 22.

In addition, each Party shall possess the right to seek specific performance (injunctive relief) of the non-delivery related terms of this Agreement and any Confirmation in any forum having competent jurisdiction. In seeking to enforce the terms of this Agreement, however, consistent with Section 21.1, no Party is entitled to receive or recover monetary damages except as provided in Sections 21.3 and 22.

21.3 The following damages provision shall apply to all transactions under this Agreement. For transactions under Service Schedule A, however, this damages provision or some other damages provision will apply only if such a damages provision is agreed to through a Confirmation. The damages under this Section 21.3 apply to a Party's failure to deliver or receive (or make available in the case of capacity) capacity and/or energy in violation of the terms of the Agreement and any Confirmation. The Contract Quantity and Contract Price referred to in this Section 21.3 are part of the agreement between the Parties for which damages are being calculated under this Section.

(a) If either Party fails to deliver or receive (or make available in the case of capacity), as the case may be, the quantities of capacity and/or energy due under the Agreement and any Confirmation (thereby becoming a "Non-Performing Party" for the purposes of this Section 21.3), the other party (the "Performing Party") shall be entitled to receive from the Non-Performing Party an amount calculated as follows (unless performance is excused by Uncontrollable Forces as provided in Section 10, the applicable Service Schedule, or by the Performing Party):

- (1) If the amount the Purchaser scheduled or received in any hour is less than the applicable hourly Contract Quantity, then the Purchaser shall be liable for (a) the product of the amount (whether positive or negative), if any, by which the Contract Price differed from the Resale Price (Contract Price - Resale Price) and the amount by which the quantity provided to the Purchaser was less than the hourly Contract Quantity; plus (b) the amount of transmission charge(s), if any, for firm transmission service upstream of the delivery point, which the Seller incurred to achieve the Resale Price, less the reduction, if any, in transmission charge(s) achieved as a result of the reduction in the Purchaser's schedule or receipt of electric energy (based on Seller's reasonable commercial efforts to achieve such reduction). If the total amounts for all hours calculated under this paragraph (1) are negative, then neither the Purchaser nor the Seller shall pay any amount under this Section 21.3(a)(1).
- (2) If the amount the Seller scheduled or delivered (or made available in the case of capacity) in any hour is less than the applicable hourly Contract Quantity, then the Seller shall be liable for (a) the product of the amount (whether positive or negative), if any, by which the Replacement Price differed from the Contract Price (Replacement Price - Contract Price) and the amount by which the quantity provided by the Seller was less than the hourly Contract

Quantity; plus (b) the amount of transmission charge(s), if any, for firm transmission service downstream of the delivery point, which the Purchaser incurred to achieve the Replacement Price, less the reduction, if any, in transmission charge(s) achieved as a result of the reduction in the Seller's schedule or delivery (based on Purchaser's reasonable commercial effort to achieve such reduction). If the total amounts for all hours calculated under this paragraph (2) are negative, then neither the Purchaser nor the Seller shall pay any amount under this Section 21.3(a)(2).

- (3) The Non-Performing Party also shall reimburse the Performing Party for any charges imposed on the Performing Party under open access transmission or FERC accepted or approved tariffs for regional organizations due to the non-performance.
- (4) The Non-Performing Party shall pay any amount due from it under this section within the billing period as specified in Section 9 of this Agreement or agreed to in the applicable Confirmation if the Parties agreed to revise the billing period in Section 9.
- (5) In the event (a) two Parties entered into two or more Confirmations in which the same Party is the Purchaser and the other Party is the Seller, (b) deliveries under two or more of such Confirmations are to occur, in whole or in part, on the same date and hour, and at the same delivery point, and (c) as to such date, hour, and delivery point, and with respect to one or more of such Confirmations, a

Party is a Non-Performing Party (for purposes of this Section 21.3(a)(5), each such instance of non-performance, a “non-performed transaction”), then, as set out in this Section 21.3(a)(5), each non-performed transaction shall be identified to a Confirmation, and the Contract Price of the Confirmation to which the non-performed transaction is identified, and the Contract Quantity of the non-performed transaction, shall be applied to the calculation of amounts due under Section 21.3(a)(1) through (3), as applicable.

The Parties in good faith shall seek to agree to the identification of each non-performed transaction to a Confirmation.

Each non-performed transaction not identified to a Confirmation by agreement, and any megawatt hours that are not fully accounted for by such identification, shall be identified to Confirmation(s) as follows:

- (i) The Performing Party in good faith shall determine whether each Confirmation is real-time, day-ahead, or forward; all Confirmations that are not real-time or day-ahead shall be deemed forward Confirmations.
- (ii) The Performing Party in good faith shall determine whether each non-performed transaction is real-time, day-ahead, or forward; all non-performed transactions that are not real-time or day-ahead shall be deemed forward non-performed transactions.

- (iii) The Performing Party shall:
  - (x) identify real-time non-performed transactions to real-time Confirmations, provided, that if the megawatt hours of real-time non-performed transactions exceed the megawatt hours of real-time Confirmations, then such excess megawatt hours shall be identified to day-ahead Confirmations and any excess megawatt hours remaining after such identification to day-ahead Confirmations shall be identified to forward Confirmations.
  - (y) identify day-ahead non-performed transactions to day-ahead Confirmations, provided, that if the megawatt hours of day-ahead non-performed transactions exceed the megawatt hours of day-ahead Confirmations, then such excess megawatt hours shall be identified to forward Confirmations.
  - (z) identify all remaining non-performed transactions to forward Confirmations.

The Performing Party, in its billing for amounts due under Section 21.3(a)(1) through (3), shall set out a detailed explanation of each applicable determination under parts (i), (ii), and (iii) of this Section 21.3(a)(5), and state the resulting Contract Quantity and Contract Price, and any amounts associated with each such determination under Section 21.3(a)(3).



- (b) The Parties agree that the amounts recoverable under this Section 21.3 are a reasonable estimate of loss and not a penalty, and represent the sole and exclusive remedy for the Performing Party. Such amounts are payable for the loss of bargain and the loss of protection against future risks.
- (c) Each Party agrees that it has a duty to mitigate damages in a commercially reasonable manner to minimize any damages it may incur as a result of the other Party's performance or non-performance of this Agreement.
- (d) In the event the Non-Performing Party disputes the calculation of the damages under this Section 21.3, the Non-Performing Party shall pay the full amount of the damages as required by Section 9 of this Agreement to the Performing Party. After informal dispute resolution as required by Section 34.1, any remaining dispute involving the calculation of the damages shall be referred to binding dispute resolution as provided by Section 34.2 of this Agreement. If resolution or agreement results in refunds or the need for refunds to the Non-Performing Party, such refunds shall be calculated in accordance with Section 9.4 of this Agreement.
- (e) In the event non-performance of a transaction is accounted for by means of a Damages Settlement Transaction and the Damages Settlement Transaction is performed, then no damages shall be calculated or due under § 21.3(a) with respect to the non-performed transaction. Neither Party shall be required to enter into a Damages Settlement Transaction.

**22. DEFAULT OF TRANSACTIONS UNDER THIS AGREEMENT AND  
CONFIRMATIONS:**

**22.1 EVENTS OF DEFAULT**

An "Event of Default" shall mean with respect to a Party ("Defaulting Party"):

- (a) the failure by the Defaulting Party to make, when due, any payment required pursuant to this Agreement or Confirmation if such failure is not remedied within two (2) Business Days after written notice of such failure is given to the Defaulting Party by the other Party ("the Non-Defaulting Party"). The Non-Defaulting Party shall provide the notice by facsimile to the designated contact person for the Defaulting Party and also shall send the notice by overnight delivery to such contact person; or
- (b) the failure by the Defaulting Party to provide clear and good title as required by Section 33.3, or to have made accurate representations and warranties as required by Section 37 and such failure is not cured within five (5) Business Days after written notice thereof to the Defaulting Party;  
or
- (c) The institution, with respect to the Defaulting Party, by the Defaulting Party or by another person or entity of a bankruptcy, reorganization, moratorium, liquidation or similar insolvency proceeding or other relief under any bankruptcy or insolvency law affecting creditor's rights or a petition is presented or instituted for its winding-up or liquidation; or
- (d) The failure by the Defaulting Party to provide adequate assurances of its ability to perform all of its outstanding material obligations to the Non-

Defaulting Party under the Agreement or any Confirmation pursuant to Section 27 of this Agreement or any substitute or modified provision in any Confirmation.

- (e) With respect to its Guarantor, if any:
  - (i) if a material representation or warranty made by a Guarantor in connection with this Agreement, or any transaction entered into hereunder, is false or misleading in any material respect when made or when deemed made or repeated; or
  - (ii) the failure of a Guarantor to make any payment required or to perform any other material covenant or obligation in any guarantee made in connection with this Agreement, including any transaction entered into hereunder, and such failure shall not be remedied within three (3) Business Days after written notice; or
  - (iii) the institution, with respect to the Guarantor, by the Guarantor or by another person or entity of a bankruptcy, reorganization, moratorium, liquidation or similar insolvency proceeding or other relief under any bankruptcy or insolvency law affecting creditor's rights or a petition is presented or instituted for its winding-up or liquidation; or
  - (iv) the failure, without written consent of the other Party, of a Guarantor's guarantee to be in full force and effect for purposes of this Agreement (other than in accordance with its terms) prior to

the satisfaction of all obligations of such Party under each transaction to which such guarantee shall relate; or

- (v) a Guarantor shall repudiate, disaffirm, disclaim, or reject, in whole or in part, or challenge the validity of, any guarantee.

## 22.2 REMEDIES FOR EVENTS OF DEFAULT

22.2(a) If an Event of Default shall have occurred and be continuing, the Non-Defaulting Party, upon written notice to the Defaulting Party, shall have the right (i) to suspend performance of transactions under this Agreement; provided, however, (i) in no event shall any such suspension continue for longer than ten (10) Business Days; (ii) such suspension must include all transactions under this Agreement in effect as of the date of the suspension between the Defaulting Party and the Non-Defaulting Party; and (iii) such suspension is available only once for each default. This ten (10) day suspension period shall not affect in any way the thirty (30) day period for exercising a right of termination under Section 22.2(b). The Non-Defaulting Party shall have the unilateral right to exercise its rights under this Agreement including its termination rights at any time within the suspension period. The Defaulting Party shall have no suspension rights. In no event shall the suspension continue beyond the cure of or waiver by the Non-Defaulting Party of the applicable Event of Default. If the Non-Defaulting Party seeks to terminate the suspension period such that the suspension shall be terminated prior to the end of the ten (10) Business Day period specified above, it may do so only by providing at least

twenty-four (24) hours written notice to the Defaulting Party before the suspension may be terminated.

22.2(b) If an Event of Default occurs, the Non-Defaulting Party shall possess the right to terminate all transactions between the Parties under this Agreement upon written notice (by facsimile or other reasonable means) to the Defaulting Party, such notice of termination to be effective immediately upon receipt. If the Non-Defaulting Party fails to exercise this right of termination within thirty (30) days following the time when the Event of Default becomes known (or more than thirty days if the Non-Defaulting and Defaulting Parties agree to an extension), then such right of termination shall no longer be available to the Non-Defaulting Party as a remedy for the Event(s) of Default; provided, however, this thirty day requirement for exercising termination rights shall not apply to defaults pursuant to Sections 22.1(c) and 22.1(e)(iii). The Non-Defaulting Party terminating transaction(s) under this Section 22.2 may do so without making a filing at FERC.

If the Non-Defaulting Party elects to terminate under this Section, it shall be required to terminate all transactions between the Parties under the Agreement at the same time. Upon termination, the Non-Defaulting Party shall liquidate all transactions as soon as practicable, provided that in no event will the Non-Defaulting Party be allowed to liquidate Service Schedule A transactions. The payment associated with termination ("Termination Payment") shall be calculated in accordance with this

Section 22.2 and Section 22.3. The Termination Payment shall be the sole and exclusive remedy for the Non-Defaulting Party for each terminated transaction ("Terminated Transaction") for the time period beginning at the time notice of termination under this Section 22 is received. Prior to receipt of such notice of termination by the Defaulting Party, the Non-Defaulting Party may exercise any remedies available to it under Section 21.3 of this Agreement or Confirmation(s), and any other remedies available to it at law or otherwise.

Upon termination, the Non-Defaulting Party may withhold any payments it owes the Defaulting Party for any obligations incurred prior to termination under this Agreement or Confirmation(s) until the Defaulting Party pays the Termination Payment to the Non-Defaulting Party. The Non-Defaulting Party shall possess the right to set-off the amount due it under this Section 22 by any such payments due the Defaulting Party as provided in Section 22.3(d).

### 22.3 LIQUIDATION CALCULATION OPTIONS

The Non-Defaulting Party shall calculate the Termination Payment as follows:

- (a) The Gains and Losses shall be determined by comparing the value of the remaining term, transaction quantities, and transaction prices under each Terminated Transaction had it not been terminated to the equivalent quantities and relevant market prices for the remaining term either quoted by a bona fide third-party offer or which are reasonably expected to be available in the market under a replacement contract for each Terminated

Transaction. To ascertain the market prices of a replacement contract, the Non-Defaulting Party may consider, among other valuations, quotations from Dealers in energy contracts, any or all of the settlement prices of the NYMEX power futures contracts (or NYMEX power options contracts in the case of Physically-Settled Options) and other bona fide third party offers, all adjusted for the length of the remaining term and differences in transmission. It is expressly agreed that the Non-Defaulting Party shall not be required to enter into replacement transactions in order to determine the Termination Payment.

- (b) The Gains and Losses calculated under paragraph (a) shall be discounted to present value using the Present Value Rate as of the time of termination (to take account to the period between the time notice of termination was effective and when such amount would have otherwise been due pursuant to the relevant transaction). The "Present Value Rate" shall mean the sum of 0.50% plus the yield reported on page "USD" of the Bloomberg Financial Markets Services Screen (or, if not available, any other nationally recognized trading screen reporting on-line intraday trading in United States government securities) at 11:00 a.m. (New York City, New York time) for the United States government securities having a maturity that matches the average remaining term of the Terminated Transactions; and
- (c) The Non-Defaulting Party shall set off or aggregate, as appropriate, the Gains and Losses (as calculated in Section 22.3(a)) and Costs and notify

the Defaulting Party. If the Non-Defaulting Party's aggregate Losses and Costs exceed its aggregate Gains, the Defaulting Party shall, within three (3) Business Days of receipt of such notice, pay the Termination Payment to the Non-Defaulting Party, which amount shall bear interest at the Present Value rate from the time notice of termination was received until paid. If the Non-Defaulting Party's aggregate Gains exceed its aggregate Losses and Costs, the Non-Defaulting Party, after any set-off as provided in paragraph (d), shall pay the remaining amount to the Defaulting Party within three (3) Business Days of the date notice of termination was received including interest at the Present Value from the time notice of termination was received until the Defaulting Party receives payment.

- (d) The Non-Defaulting Party shall aggregate or set off, as appropriate, at its election, any or all other amounts owing between the Parties (discounted at the Present Value Rate) under this Agreement and any Confirmation against the Termination Payment so that all such amounts are aggregated and/or netted to a single liquidated amount. The net amount due from any such liquidation shall be paid within three (3) Business Days following the date notice of termination is received.
- (e) (i) If the Non-Defaulting Party owes the Defaulting Party monies under this Section 22.3, then notwithstanding the three Business Day payment requirement detailed above, the Non-Defaulting Party may elect to pay the Defaulting Party the monies owed under this Section 22.3 over the remaining life of the contract(s) being



terminated. The Non-Defaulting Party may make this election by providing written notice to the Defaulting Party within three Business Days of the notice being provided to terminate and liquidate under this Section 22.3. The Non-Defaulting Party shall provide the Defaulting Party with the details on the method for recovering the monies owed over the remaining life of the contract(s). That method shall ensure that the Defaulting Party receives a payment each month through the end of the term of each contract which allows it to receive the monies which would have been due it under Sections 22.3(c) and (d) in total (to be recovered over the term of the contract(s) to replicate as closely as possible the payment streams under such contract(s)) provided that the discounting using the Present Value Rate referenced in Section 22.3 (b) shall not be reflected in determining the amounts to be recovered under this provision. Any disputes as to the methodology shall be resolved pursuant to the dispute resolution procedures in Section 34, with binding arbitration pursuant to Section 34.2 required for disputes as to the methodology if mediation is unsuccessful.

- (ii) This Section 22.3(e) and the rights and obligations under it shall survive termination of any applicable transactions or agreements.
- (iii) The Party owed monies under this Section 22.3(e) shall have the right to request credit assurances consistent with Section 27 even

after termination of any contract or transaction.

- (iv) If the Party owing money defaults on its payment obligations consistent with Section 22.1(a) or defaults with regard to providing credit assurances consistent with Section 22.1(d), then the other Party shall have the right (by written notice) at any time after the Party owing money defaults to require that Party to pay all monies owed under all of the contracts subject to this Section 22.3(e) within three Business Days of receipt of the written notice. The monies to be paid under this accelerated payment provision shall be the remaining amounts to be paid under the contract(s) reflecting a discount using the Present Value Rate from the date of the written notice.
  
- (f) If the Defaulting Party disagrees with the calculation of the Termination Payment and the Parties cannot otherwise resolve their differences, the calculation issue shall be submitted to informal dispute resolution as provided in Section 34.1 of this Agreement and thereafter binding dispute resolution pursuant to Section 34.2 if the informal dispute resolution does not succeed in resolving the dispute. Pending resolution of the dispute, the Defaulting Party shall pay the full amount of the Termination Payment calculated by the Non-Defaulting Party within three (3) Business Days (except if the option under 22.3(e) has been invoked in which case the payment times in that provision would apply) of receipt of notice as set forth in Sections 22.3(c) and (d) subject to the Non-Defaulting Party

refunding, with interest, pursuant to Section 9.4, any amounts determined to have been overpaid.

- (g) For purposes of this Section 22.3:
- (i) "Gains" means the economic benefit (exclusive of Costs), if any, resulting from the termination of the Terminated Transactions, determined in a commercially reasonable manner as calculated in accordance with this Section 22.3;
  - (ii) "Losses" means the economic loss (exclusive of Costs), if any, resulting from the termination of the Terminated Transactions, determined in a commercially reasonable manner as calculated in accordance with this Section 22.3;
  - (iii) "Costs" means brokerage fees, commissions and other similar transaction costs and expenses reasonably incurred in terminating any specifically related arrangements which replace a Terminated Transaction, transmission and ancillary service costs associated with Terminated Transactions, and reasonable attorneys' fees, if any, incurred in connection with the Non-Defaulting Party enforcing its rights with regard to the Terminated Transactions. The Non-Defaulting Party shall use reasonable efforts to mitigate or eliminate these Costs.
  - (iv) In no event, however, shall a Party's Gains, Losses or Costs include any penalties or similar charges imposed by the Non-Defaulting Party.

**22A. DEFAULT IN PAYMENT OF WSPP OPERATING COSTS:**

22A.1 A Party shall be deemed to be in default in payment of its share of WSPP operating costs pursuant to Section 7 of this Agreement, if any, when payment is not received within ten (10) days after receipt of written notice. A default by any Party in such payment obligations shall be cured by payment of all overdue amounts together with interest accrued at the rate of one percent (1%) per month, or the maximum interest rate permitted by law, if any, whichever is less, prorated by days from the due date to the date the payment curing the default is made unless and until the Executive Committee shall determine another rate.

22A.2 A defaulting Party, which is in default under Section 22.A1, shall be liable for all costs, including costs of collection and reasonable attorney fees, plus interest as provided in Section 22.A1 hereof.

22A.3 The rights under this Agreement of a Party which is in default of its obligation to pay operating costs under this Agreement for a period of three (3) months or more may be revoked by a vote of the non-defaulting Parties' representatives on the Executive Committee consistent with Section 8.3. The defaulting Party's rights shall not be revoked, however, unless said Party has received at least thirty (30) days written notice of the non-defaulting Parties' intent to revoke such rights. Said notice shall state the date on which the revocation of rights shall become effective if the default is not cured and shall state all actions which must be taken or amounts which must be paid to cure the default. This provision allowing the non-defaulting Parties to revoke such rights is in addition to any other remedies provided in this Agreement or at law and shall in no way limit the non-defaulting

Parties' ability to seek judicial enforcement of the defaulting Party's obligations to pay its share of the operating costs under this Agreement. Upon the effective date of such revocation of rights, the defaulting party shall not be allowed to enter into any new transactions under this Agreement. The defaulting party under the Agreement and Confirmation(s) shall be required to carry out all obligations that existed prior to the effective date of such revocation. If a defaulting Party's rights under this Agreement have been revoked, the Executive Committee may restore that Party's rights upon the defaulting Party paying all amounts due and owing under this Agreement.

22A.4 Upon revocation of the rights of a defaulting Party under this Agreement, costs of the WSPP hereunder shall be equally shared among the remaining Parties. Cost allocation adjustments shall be retroactive to the date of the default.

**23. OTHER AGREEMENTS:**

No provision of this Agreement shall preclude any Party from entering into other agreements or conducting transactions under existing agreements with other Parties or third parties. This Agreement shall not be deemed to modify or change any rights or obligations under any prior contracts or agreements between or among any of the Parties.

**24. GOVERNING LAW:**

This Agreement and any Confirmation shall be governed by and construed in accordance with the laws of the State of Utah, without regard to the conflicts of laws rules thereof. The foregoing notwithstanding, (1) if both the Seller and Purchaser are organized under the laws of Canada, then the laws of the province of the Seller shall govern, or (2) if the Seller or Purchaser is an agency of or part of the United States Government, then the laws of the United States of America shall govern.

**25. JUDGMENTS AND DETERMINATIONS:**

Whenever it is provided in this Agreement that a Party shall be the sole judge of whether, to what extent, or under what conditions it will provide a given service, its exercise of its judgment shall be final and not subject to challenge. Whenever it is provided that (i) a service under a given transaction may be curtailed under certain conditions or circumstances, the existence of which are determined by or in the judgment of a Party, or (ii) the existence of qualifications for membership shall be determined by the Executive Committee pursuant to Section 16, that Party's or the Executive Committee's determination or exercise of judgment shall be final and not subject to challenge if it is made in good faith and not made arbitrarily or capriciously.



**26. COMPLETE AGREEMENT:**

This Agreement and the Confirmation(s), shall constitute the full and complete agreement of the Parties with respect to a transaction, except as provided under Section 32.4.

**27. CREDITWORTHINESS:**

Should a Party's creditworthiness, financial responsibility, or performance viability become unsatisfactory to the other Party in such other Party's reasonably exercised discretion with regard to any transaction pursuant to this Agreement and any Confirmation, the dissatisfied Party (the "First Party") may require the other Party (the "Second Party") to provide, at the Second Party's option (but subject to the First Party's acceptance based upon reasonably exercised discretion), either (1) the posting of a Letter of Credit, (2) a cash prepayment, (3) the posting of other acceptable collateral or security by the Second Party, (4) a Guarantee Agreement executed by a creditworthy entity; or (5) some other mutually agreeable method of satisfying the First Party. The Second Party's obligations under this Section 27 shall be limited to a reasonable estimate of the damages to the First Party (consistent with Section 22.3 of this Agreement) if the Second Party were to fail to perform its obligations. Events which may trigger the First Party questioning the Second Party's creditworthiness, financial responsibility, or performance viability include, but are not limited to, the following:

- (1) The First Party has knowledge that the Second Party (or its Guarantor if applicable) are failing to perform or defaulting under other contracts.
- (2) The Second Party has exceeded any credit or trading limit set out in any Confirmation or other agreement between the Parties.
- (3) The Second Party or its Guarantor has debt which is rated as investment grade and that debt falls below the investment grade rating by at least one rating agency or is below investment grade and the rating of that debt is downgraded further by at least one rating agency.

- (4) Other material adverse changes in the Second Party's financial condition occur.
- (5) Substantial changes in market prices which materially and adversely impact the Second Party's ability to perform under this Agreement or any Confirmation occur.

If the Second Party fails to provide such reasonably satisfactory assurances of its ability to perform a transaction hereunder within three (3) Business Days of demand therefore, that will be considered an Event of Default under Section 22 of this Agreement and the First Party shall have the right to exercise any of the remedies provided for under that Section 22. Nothing contained in this Section 27 shall affect any credit agreement or arrangement, if any, between the Parties.

**28. NETTING:**

- 28.1 Parties shall net payments (associated with transactions under this Agreement and Confirmation(s)) in accordance with Exhibit A, if such Parties have executed the form attached as Exhibit A. The Parties' obligations to net shall include the netting of all payments received by the Parties in the same calendar month. Parties that have executed Exhibit A shall provide a signed copy of Exhibit A to a representative of the WSPP and to any Party that requests a copy and indicate on the WSPP Homepage that they have executed Exhibit A. If a Party indicated its election to net payments on the WSPP Homepage and that Party desires to withdraw its agreement to net, that Party shall provide at least 30 days notice on the WSPP Homepage of the change in its election to net and also shall provide, concurrent with its withdrawal notice, written notice to all Parties with which it has ongoing transactions or with which it has committed to future transactions under the Agreement at the time of the notice. Any such changes in netting status shall apply beginning at least 30 days after notice required by this Section 28.2 is provided and only shall apply to transactions agreed to beginning on or after the date the change in netting status becomes effective.
- 28.2 The Parties may by separate agreement either through a Confirmation or some other agreement set out specific terms relating to the implementation of the netting in addition to or in lieu of Exhibit A.
- 28.3 Each Party reserves to itself all rights, set offs, counterclaims, and other remedies and defenses (to the extent not expressly herein waived or denied) which such

Party has or may be entitled to arising from or out of this Agreement and any applicable Confirmation.

**29. TAXES:**

The Contract Price for all transactions under this Agreement shall include full reimbursement for, and the Seller is liable for and shall pay, or cause to be paid, or reimburse the Purchaser for if the Purchaser has paid, all taxes applicable to a transaction that arise prior to the delivery point. If the Purchaser is required to remit such tax, the amount shall be deducted from any sums due to the Seller. The Seller shall indemnify, defend, and hold harmless the Purchaser from any claims for such taxes. The Contract Price does not include reimbursement for, and the Purchaser is liable for and shall pay, cause to be paid, or reimburse the Seller for if the Seller has paid, all taxes applicable to a transaction arising at and from the delivery point, including any taxes imposed or collected by a taxing authority with jurisdiction over the Purchaser. The Purchaser shall indemnify, defend, and hold harmless the Seller from any claims for such taxes. Either Party, upon written request of the other Party, shall provide a certificate of exemption or other reasonably satisfactory evidence of exemption if either Party is exempt from taxes, and shall use reasonable efforts to obtain and cooperate with the other Party in obtaining any exemption from or reduction of any tax. Taxes are any amounts imposed by a taxing authority associated with the transaction.

**30. CONFIDENTIALITY:**

30.1 The terms of any transaction under this Agreement or any other information exchanged by the Purchaser and Seller relating to the transaction shall not be disclosed to any person not employed or retained by the Purchaser or the Seller or their affiliates, except to the extent disclosure is (1) required by law, (2) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of any litigation or dispute, (3) otherwise permitted by consent of the other Party, which consent shall not be unreasonably withheld, (4) required to be made in connection with regulatory proceedings (including proceedings relating to FERC, the United States Securities and Exchange Commission or any other federal, state or provincial regulatory agency); (5) required to comply with North American Electric Reliability Organization, regional reliability council, or successor organization requirements; (6) necessary to obtain transmission service; or (7) to a developer of an index of electric power prices in accordance with Section 30.2. In the event disclosure is made pursuant to this provision, the Parties shall use reasonable efforts to minimize the scope of any disclosure and have the recipients maintain the confidentiality of any documents or confidential information covered by this provision, including, if appropriate, seeking a protective order or similar mechanism in connection with any disclosure. This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a breach of this provision).

30.2 A Party may disclose the terms of transactions under this Agreement, excluding the identities of parties, to any developer of any index of electric power prices without violation of the confidentiality obligations under Section 30.1 if: (1) the disclosing Party and the index developer have entered into a written agreement, prior to the disclosure, under which the developer has agreed to use the information solely for the development of an index of electric power prices for publication and not for any other purpose; and (2) the index with respect to which disclosure is made is an aggregation of terms of transactions and does not identify terms of single transactions or the identities of parties to transactions.



**31. TRANSMISSION TARIFF:**

Pursuant to FERC Order No. 888, issued on April 24, 1996, and FERC orders where applicable, the WSPP Default Transmission Tariff has been filed and has become effective. The Parties agree to be bound by the terms of that Tariff for so long as they are WSPP members.

## 32. TRANSACTION SPECIFIC TERMS AND ORAL AGREEMENTS:

### 32.1 General

32.1.1 A Confirmation shall include, at a minimum, the Standard Confirmation Provisions. (See Exhibit C for a sample). Subject to the limitations in Section 32.2 (Standard Confirmation Provisions) and Section 32.3 (Non-Standard Confirmation Provisions), the Confirmation shall be made in writing by a Documentary Writing or an Electronic Writing, or shall be an Electronic Platform Confirmation.

32.1.2 Pursuant to the provisions of this Section 32, the Parties to a transaction under this Agreement may agree to modify any term of this Agreement (other than provisions regarding the operation of the WSPP as an organization including Sections 7 and 8) which applies to such transaction, such agreement to be stated in a Confirmation or Confirmations.

32.1.3 Sections 32.2 and 32.3 shall not apply to an Electronic Platform Confirmation. Parties may amend an Electronic Platform Confirmation in accordance with the procedures, if any, of the applicable platform or exchange or in any other manner this Agreement permits. Each Electronic Platform Confirmation between WSPP members shall be subject to this Agreement, unless the transaction specified in the Electronic Platform Confirmation is subject to another agreement between the Parties other than a master Confirmation applicable to the Parties' WSPP Confirmations.

32.2 Process For Confirming Standard Confirmation Provisions.

32.2.1 Confirmation of Standard Confirmation Provisions For Transactions of Less Than One Week in Duration.

Confirmation for Standard Confirmation Provisions applicable to transactions of less than one week in duration may be through:

- (i) a Documentary Writing (including a Confirmation which is not executed by both Parties but which is binding under Section 32.2.3) or
- (ii) an Electronic Writing.

Notwithstanding the foregoing sentence, with respect to a transaction of less than one week in duration as agreed in an Electronic Writing and that is to commence within one week of that agreement, a subsequent proposed confirming Documentary Writing under Section 32.2.3 shall not vary the terms of the Electronic Writing unless the Documentary Writing is executed by both Parties.

32.2.2 Standard Confirmation Provisions For Transactions of One Week or More in Duration.

Written confirmation shall be required for all Standard Confirmation Provisions for transactions of one week or more in duration. Such written confirmation may be made by a Documentary Writing executed by both Parties or a Documentary Writing not executed by both Parties but which is binding under Section 32.2.3.

32.2.3 Written Confirmation Process for Standard Confirmation Provisions.

The Seller shall provide a proposed Documentary Writing containing the proposed Standard Confirmation Provisions which must be received by the Purchaser within five Business Days of the date of the agreement to the transaction. The Purchaser shall have five Business Days from date of receipt to accept or propose modifications to the proposed Documentary Writing. If the Purchaser does not respond within that time period, the Seller's proposed Documentary Writing shall be considered as accepted and shall be the final Confirmation. If the Seller fails to provide a proposed Documentary Writing within the five Business Days period, then, within the immediately subsequent five Business Days, the Purchaser may submit a proposed Documentary Writing to the Seller. The Seller shall then have five Business Days from date of receipt to accept or propose modifications to the proposed Documentary Writing. If the Seller does not respond within that time period, the Purchaser's proposed Documentary Writing shall be considered as accepted and shall be the final Confirmation.

32.3 Process for Confirming Non-Standard Confirmation Provisions.

32.3.1 Non-Standard Confirmation Provisions for Transactions of Less Than One Week in Duration. Confirmation for Non-Standard Confirmation Provisions for a transaction of less than one week in duration only may be through: (i) an Electronic Writing; or (ii) in a Documentary Writing executed by both Parties.

32.3.2 Non-Standard Confirmation Provisions for Transactions of One Week or More in Duration. Confirmation for Non-Standard Confirmation Provisions for transactions of one week or more only shall be through a Documentary Writing executed by both Parties.

32.3.3 WSPP Agreement is a Default Agreement.

If the Parties to a transaction (i) do not reach agreement on any proposed Non-Standard Confirmation Provision and (ii) do not confirm it under Section 32.3.1 or 32.3.2, as applicable, then the term or terms of the Agreement, which the Parties could not reach agreement to modify or change or which are not considered modified pursuant to this Section 32.3, shall apply to the transaction.

32.4 Prior Discussions And Statements

32.4.1 A Confirmation under Section 32.2 and/or 32.3, shall, together with this Agreement, be an integrated contract with respect to the transaction, shall supersede all discussions and negotiations with respect thereto, and are intended by the Parties as a final expression of their agreement with respect to such terms as are included therein and may not be contradicted by evidence of any prior agreement unless there is clear and convincing evidence of a mutual mistake in the Confirmation.

32.4.2 Notwithstanding any provision in this Agreement (including Sections 32.3.2 and 32.4.1), until the Confirmation has become final in accordance with Sections 32.2 and/or 32.3 for a transaction, any oral agreement or

electronic communication establishing agreement of the Parties relating to such transaction shall remain valid and binding.

- 32.5 The Parties agree not to contest, or assert any defense with respect to, the validity or enforceability of any agreement to the terms concerning a specific transaction, on the basis that documentation of such terms fails to comply with the requirements of any statute that agreements be written or signed. Each Party consents to the recording by the other Party, without any further notice, of telephone conversations between representatives of the Parties, which contain agreements to or discussion concerning the terms of a specific transaction. All such recordings may be introduced and admitted into evidence for the purpose of proving agreements to terms, and any objection to such introduction or admission for such purpose is hereby expressly waived.
- 32.6 In the event of a conflict between a binding and effective Confirmation and this Agreement, the Confirmation shall govern.
- 32.7 The Seller shall not be required to file any Confirmation with FERC except as provided in the Service Schedules.
- 32.8 Other Products and Service Levels: The Parties may apply this Agreement and make a Confirmation with respect to a product/service level defined under any other document or form of agreement (e.g., the California ISO tariff, the ERCOT agreement or the EEI agreement). The confirmation process set forth in Section 32.3 shall apply to any such Confirmation. Unless the Parties expressly state and agree that all the terms and conditions of such other agreement will apply to any such transaction consistent with Section 32.3, the transaction shall be subject to

all the terms of this Agreement, except that (1) all service level/product definitions, (2) force majeure/uncontrollable force definitions, and (3) other terms as mutually agreed shall have the meaning ascribed to them in the different agreement or in the applicable Confirmation.

32.9 Reserved.

32.10 The Parties may agree to modify terms of this Agreement for more than one transaction pursuant to a separate written agreement (a “master confirmation agreement”), which agreement shall be considered part of each Confirmation between the Parties and shall apply to all transactions entered into between the two Parties unless the Parties specifically agree to override such changes for a particular transaction consistent with the procedure in Section 32.2 or 32.3, whichever is applicable.

**33. PERFORMANCE, TITLE, AND WARRANTIES FOR TRANSACTIONS UNDER SERVICE SCHEDULES:**

33.1 Performance

33.1.1 The Seller shall deliver to the delivery point(s) as agreed to in the applicable Confirmation and sell to the Purchaser in accordance with the terms of the Agreement and such Confirmation.

33.1.2 The Purchaser shall receive and purchase the Contract Quantity, as agreed to by the Parties in the applicable Confirmation, at the delivery point(s) and purchase from the Seller in accordance with the terms of the Agreement and such Confirmation.

33.2 Title and Risk of Loss

Title to and risk of loss of the electric energy shall pass from the Seller to the Purchaser at the delivery point agreed to in the Confirmation; provided, however, with regard to federal agencies or parts of the United States Government, title to and risk of loss shall pass to Purchaser to the extent permitted by and consistent with applicable law.

33.3 Warranties

The Seller warrants that it will transfer to the Purchaser good title to the electric energy sold under the Agreement and any Confirmation, free and clear of all liens, claims, and encumbrances arising or attaching prior to the delivery point and that Seller's sale is in compliance with all applicable laws and regulations.

**THE SELLER HEREBY DISCLAIMS ALL OTHER WARRANTIES,**



**EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF  
MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

## **34. DISPUTE RESOLUTION:**

### **34.1 INFORMAL DISPUTE RESOLUTION**

Before binding dispute resolution or any other form of litigation may proceed, any dispute between the Parties to a transaction under this Agreement first shall be referred to nonbinding mediation except for actions taken pursuant to Section 21.2. The Parties shall attempt to agree upon a mediator from a list of ten (10) candidates provided by the Chairman of the WSPP Operating Committee or his or her designee. If the Parties are unable to agree, then the Chairman or the designee shall appoint a mediator for the dispute. Neither the mediator nor the person involved on behalf of the WSPP in developing a list of mediators for the Parties to choose from or in selecting the mediator (if the Parties are unable to do so) shall possess a direct or indirect interest in either Party or the subject matter of the mediation. The WSPP shall establish procedures for the appointment of mediators and the conduct of mediation and those procedures shall apply to the mediation.

### **34.2 BINDING DISPUTE RESOLUTION**

The Parties to a dispute may elect binding dispute resolution using the following process unless binding arbitration of certain disputes is required under this Agreement in which event the Parties shall use the process set forth in this Section 34.2 to resolve such disputes, unless the Parties otherwise agree:

- (a) **WSPP Dispute Resolution:** A Party to a dispute (if binding dispute resolution is required) or all Parties to a dispute (if agreement of the Parties is required for binding dispute resolution) may initiate binding

dispute resolution under WSPP procedures by notifying the Chairman of the WSPP Operating Committee or his or her designee. The Chairman or his or her designee shall provide the Parties with a list of ten (10) eligible arbitrators. Within ten (10) days of receiving the list, the Parties shall agree on a single arbitrator from the list to conduct the arbitration, or notify the Chairman of the Operating Committee or the designee of their inability to reach agreement. If notified of the Parties inability to reach agreement, then the Chairman or the designee shall choose the arbitrator from the list within five (5) days. Neither the arbitrator nor the person involved on behalf of the WSPP in developing a list of arbitrators for the Parties to choose from or in selecting the arbitrator (if the Parties are unable to do so) shall possess a direct or indirect interest in either Party or the subject matter of the arbitration. The Procedures to be used for this arbitration shall follow the arbitration procedures which shall be developed and maintained by the WSPP and the procedures will be generally consistent with the commercial arbitration rules of the American Arbitration Association though not involving the Association.

If the Parties agree to binding dispute resolution under this Section 34.2, each Party understands that it will not be able to bring a lawsuit concerning any dispute that may arise which is covered by this arbitration provision. Notwithstanding the foregoing, nothing herein is intended to waive any provision of the Federal Arbitration Act, 9 U.S.C. § 1, et. seq., or any right under state

statute or common law to challenge an arbitration award or to prevent any action to enforce any arbitration award.

A Party's liability and damages under any arbitration award resulting from the process set forth in this Section 34.2 shall be limited as provided in this Agreement or in any Confirmation.

#### 34.3 COSTS

Each Party shall be responsible for its own costs and those of its counsel and representatives. The Parties shall equally divide the costs of the arbitrator or mediator and the hearing.

#### 34.4 CONFIDENTIALITY

Any arbitration or mediation under this Section 34 shall be conducted on a confidential basis and not disclosed, including any documents or results which shall be considered confidential, unless the Parties otherwise agree or such disclosure is required by law.

**35. FORWARD CONTRACTS:**

The Parties acknowledge and agree that all transactions under the Agreement and Confirmation(s) are forward contracts and that the Parties are forward contract merchants, as those terms are used in the United States Bankruptcy Code. The Parties acknowledge and agree that all of their transactions, together with this Agreement and the related Confirmation(s) form a single, integrated agreement, and agreements and transactions are entered into in reliance on the fact that the agreements and each transaction form a single agreement between the Parties.

**36. TRADE OPTION EXEMPTION**

The Parties intend that any Physically Settled Option under this Agreement shall qualify under the trade option exemption, 17 C.F.R. § 32.3. Accordingly, each Party buying or selling a Physically Settled Option agrees and warrants that any such option shall be offered only to a provider, user, or merchant and that the entities entering into the options are doing so solely for purposes related to their business.

**37. ADDITIONAL REPRESENTATIONS AND WARRANTIES:**

Each Party warrants and represents to the other(s) that it possesses the necessary corporate, governmental and legal authority, right and power to enter into and agree to the applicable Confirmation for a transaction or transactions and to perform each and every duty imposed, and that the Parties' agreement to buy and sell power under this Agreement and the Confirmation represents a contract. Each Party also warrants and represents to the other(s) that each of its representatives executing or agreeing through a Confirmation to a transaction under this Agreement is authorized to act on its behalf.

Each Party further warrants and represents that entering into this Agreement and any applicable Confirmation does not violate or conflict with its Charter, By-laws or comparable constituent document, any law applicable to it, any order or judgment of any court or other agency of government applicable to it or any agreement to which it is a party and that this Agreement and applicable Confirmation, constitute a legal, valid and binding obligation enforceable against such Party in accordance with the terms of such agreements.

Each Party also represents that it is solvent and that on each delivery this representation shall be deemed renewed unless notice to the contrary is given in writing by the Purchaser to the Seller before delivery.

**38. FLOATING PRICES:**

38.1 In the event the Parties intend that the price for a transaction is to be based on an index, exchange or any other kind of variable reference price (such price being a "Floating Price"), the Parties shall specify the "Floating Price" to be used to calculate the amounts in a Confirmation due Seller for that transaction.

38.2 Market Disruption. If a Market Disruption Event has occurred and is continuing during the Determination Period, the Floating Price for the affected Trading Day shall be determined as follows. The Parties shall negotiate in good faith to agree on a Floating Price (or a method for determining a Floating Price) for the affected Trading Day. If the Parties have not so agreed on or before the twelfth Business Day following the first Trading Day on which the Market Disruption Event occurred or existed, then the Floating Price shall be determined in good faith by the Parties based upon (1) quotes from Dealers in energy contracts; and/or (2) quotes from Brokers in energy contracts. Each Party may obtain up to a maximum of four quotes which must be provided to the other Party no later than twenty-two Business Days following the first Business Day on which the Market Disruption Event occurred or existed. These quotes shall reflect transacted prices. The Floating Price for the affected Trading Day shall equal a simple average of the quotes obtained and provided by the Parties consistent with the provisions of this Section 38. Each Party providing quote(s) to the other Party also shall identify to that other Party the Dealer(s) and/or the Broker(s) who provided each of the quotes to allow verification.



“Determination Period” means each calendar month during the term of the relevant transaction; provided that if the term of the transaction is less than one calendar month the Determination Period shall be the term of the transaction.

“Market Disruption Event” means, with respect to an index, any of the following events (the existence of which shall be determined in good faith by the Parties):

(a) the failure of the index to announce or publish information necessary for determining the Floating Price; (b) the failure of trading to commence or the permanent discontinuation or material suspension of trading in the relevant options contract or commodity on the exchange or market acting as the index; (c) the temporary or permanent discontinuance or unavailability of the index; (d) the temporary or permanent closing of any exchange acting as the index; or (e) a material change in the formula for or the method of determining the Floating Price.

“Trading Day” means a day in respect of which the relevant price source published the relevant price or would have published the relevant price but for the Market Disruption Event.

38.3 Calculation of Floating Price. For the purposes of the calculation of a Floating Price, all numbers shall be rounded to three (3) decimal places. If the fourth (4th) decimal number is five (5) or greater, then the third (3rd) decimal number shall be increased by one (1), and if the fourth (4th) decimal number is less than five (5), then the third (3rd) decimal number shall remain unchanged.

38.4 Corrections. For the purposes of determining the relevant prices for any day, if the price published or announced on a given day and used or to be used to

determine the relevant price is subsequently corrected and the correction is published or announced by the person responsible for that publication or announcement, either Party may notify the other Party of (i) that correction and (ii) the amount (if any) that is payable as a result of that correction. If a Party gives notice that an amount is so payable, the Party that originally either received or retained such amount will pay such amount consistent with the provisions of this Section 38.4. The amount that is payable as a result of the correction shall be included in the billing cycle in which the notice of the correction is provided.

**39. AMENDMENT:**

- 39.1 This Agreement may be amended upon the submission to FERC and acceptance by FERC of that amendment. The effective date of the amendment shall be the date on which FERC allows the amendment to become effective; provided, however, if the FERC orders a hearing on a filing under Section 205 of the Federal Power Act proposing an amendment to this Agreement, the amendment as it may be revised by the FERC shall not become effective until the FERC issues its final order (i.e. its order on rehearing before any judicial review) on the amendment. The Parties through the Executive Committee shall direct the filing of any amendments. The Parties to this Agreement agree to bound by this Agreement as it may be amended, provided that the Parties possess the right to challenge any amendments at FERC and to exercise any applicable withdrawal rights under this Agreement.
- 39.2 Unless otherwise stated in the amendment, all amendments shall apply only to new transactions entered into or agreed to on or after the effective date of the amendment. Preexisting agreements and transactions shall operate under the version of the WSPP Agreement effective at the time of the agreement for the transaction unless the Parties to a transaction or transactions mutually agree otherwise.
- 39.3 An agreement modifying this Agreement or a Confirmation for a transaction needs no consideration to be binding.

**40. EXECUTION BY COUNTERPARTS:**

This Agreement may be executed in any number of counterparts, and upon execution by all Parties, each executed counterpart shall have the same force and effect as an original instrument and as if all Parties had signed the same instrument. Any signature page of this Agreement may be detached from any counterpart of this Agreement without impairing the legal effect of any signatures thereon, and may be attached to another counterpart of this Agreement identical in form hereto but having attached to it one or more signature pages.

**41. WITNESS:**

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized representative as of the 27th day of July, 1991 (or as of the date of execution of this Agreement by each Party's duly authorized representation, in the case of any Party that becomes a signatory to this Agreement subsequent to July 27, 1991).

By: \_\_\_\_\_  
Name of signing official:  
Title:  
Name of Member:  
Date:

**EXHIBIT A**

**NETTING**

Each Party that executes this Exhibit A to the Agreement agrees to net payments for transactions under the WSPP Agreement and the applicable Confirmation(s) with any other Party or Parties which also have agreed to net payments by executing a copy of this Exhibit A. The Party executing this Exhibit A shall indicate below when it desires that its agreement to net becomes effective. A Party agreeing to net under this Exhibit A shall comply with the provisions of Section 28.2 of the Agreement. Defined terms used herein are as defined in the WSPP Agreement. Netting shall be done in accordance with the following provision:

If the Purchaser and Seller are each required to pay an amount on the payment due date in the same month for transactions under the Agreement and Confirmation(s), then such amounts with respect to each Party will be aggregated and the Parties will discharge their obligations to pay through netting, in which case the Party owing the greater aggregate amount will pay to the other party the difference between the amounts owed consistent with the payment times in Section 9.2 of the Agreement, unless the Parties have otherwise agreed to a different payment time as allowed by the Agreement. Each Party reserves to itself all rights, set-offs, counterclaims and other remedies and/or defenses to which it is or may be entitled, arising from or out of the Agreement. All outstanding payments between the Parties which are to be netted pursuant to this Exhibit A for transactions under WSPP Agreement and the applicable Confirmation(s) shall be offset against each other or set off or recouped therefrom.

\_\_\_\_\_  
Name of Authorized Representative

\_\_\_\_\_  
Effective Date for Netting

\_\_\_\_\_  
Name of WSPP Member

\_\_\_\_\_  
Signature of Authorized  
Representative

\_\_\_\_\_  
Date of Execution

[WSPP SAMPLE FORM – PARTIES ARE FREE TO USE THIS OR DISREGARD IT.]

**EXHIBIT B**

**FORM OF COUNTERPARTY GUARANTEE AGREEMENT**

This Guarantee Agreement (this “Guarantee”), dated, as of [\_\_\_\_], 199[\_\_\_], is made and entered into by [\_\_\_\_], a [\_\_\_\_] corporation (“Guarantor”).

**WITNESSETH:**

WHEREAS, [\_\_\_\_] (the “Company”) may enter into transactions involving power sales under the WSPP Agreement (“WSPP Agreement”) and related Confirmation(s)<sup>1</sup> (collectively “Agreements”) with [Company Name] (“Guaranteed Party”); and

WHEREAS, Guarantor will directly or indirectly benefit from the Agreements.

NOW THEREFORE, in consideration of the Guaranteed Party agreeing to conduct business with Company, Guarantor hereby covenants and agrees as follows:

1. GUARANTY. Subject to the provisions hereof, Guarantor hereby irrevocably and unconditionally guarantees the timely payment when due of the obligations of Company (the “Obligations”) to the Guaranteed Party in accordance with the Agreements. If Company fails to pay any Obligations, Guarantor shall promptly pay to the Guaranteed Party no later than the next Business Day (as defined in the WSPP Agreement), after notification, the amount due in the same currency and manner provided for in the Agreements. This Guarantee shall constitute a guarantee of payment and not of collection. Guarantor shall have no right of subrogation with respect to any payments it makes under this Guarantee until all of the Obligations of Company to the Guaranteed Party are paid in full. The liability of Guarantor under the Guarantee shall be subject to the following:

(a) Guarantor’s liability hereunder shall be and is specifically limited to payments expressly required to be made in accordance with the Agreements (even if such payments are deemed to be damages) and, except to the extent specifically provided in the Agreements, in no event shall Guarantor be subject hereunder to consequential, exemplary, equitable, loss of profits, punitive, tort, or any other even if such fees together with the payments exceed the cap in Section 1(b), damages, costs, except that Guarantor shall be required to pay reasonable attorney fees.

(b) The aggregate liability of the Guarantor shall not exceed [\_\_\_\_] Million U.S. Dollars [\_\_\_\_\_].

2. DEMANDS AND NOTICE. If Company fails or refuses to pay any Obligations, the Guaranteed Party may make a demand upon Guarantor (hereinafter referred to as a “Payment

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Demand"). A Payment Demand shall be in writing and shall reasonably and briefly specify in what manner and what amount Company has failed to pay and an explanation of why such payment is due, with a specific statement that the Guaranteed Party is calling upon Guarantor to pay under this Guarantee. A Payment Demand satisfying the foregoing requirements shall be deemed sufficient notice to Guarantor that it must pay the Obligations. A single written Payment Demand shall be effective as to any specific default during the continuance of such default, until Company or Guarantor has cured such default, and additional Payment Demands concerning such default shall not be required until such default is cured.

3. REPRESENTATIONS AND WARRANTIES. Guarantor represents and warrants that:

(a) it is a corporation duly organized and validly existing under the laws of the State of [ ] and has the corporate power and authority to execute, deliver and carry out the terms and provisions of this Guarantee;

(b) no authorization, approval, consent or order of, or registration or filing with, any court or other governmental body having jurisdiction over Guarantor is required on the part of Guarantor for the execution and delivery of this Guarantee; and

(c) this Guarantee constitutes a valid and legally binding agreement of Guarantor enforceable against Guarantor in accordance with its terms, except as the enforceability of this Guarantee may be limited by the effect of any applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' rights generally and by general principles of equity.

4. EFFECT OF BANKRUPTCY BY COMPANY. The Guarantor's obligation to pay under this Guarantee shall not be affected in any way by the institution with respect to the Company of a bankruptcy, reorganization, moratorium or similar insolvency proceeding or other relief under any bankruptcy or insolvency law affecting creditor's rights or a petition for the Company's winding-up or liquidation.

5. AMENDMENT. No term or provision of this Guarantee shall be amended, modified, altered, waived, or supplemented except in a writing signed by the Guarantor and Guaranteed Party hereto.

6. WAIVERS. Guarantor hereby waives (a) notice of acceptance of this Guarantee; (b) presentment and demand concerning the liabilities of Guarantor, except as expressly hereinabove set forth; and (c) any right to require that any action or proceeding be brought against Company or any other person, or except as expressly hereinabove set forth, to require that the Guaranteed Party seek enforcement of any performance against Company or any other person, prior to any action against Guarantor under the terms hereof.

Except as to applicable statutes of limitation, no delay of the Guaranteed Party in the exercise of, or failure to exercise, any rights hereunder shall operate as a waiver of such rights, a waiver of any other rights or a release of Guarantor from any obligations hereunder.



Guarantor consents to the renewal, compromise, extension, acceleration or other changes in the time of payment of or other changes in the terms of the Obligations, or any part thereof or any changes or modifications to the terms of the Agreements.

Guarantor may terminate this Guarantee by providing written notice of such termination to the Guaranteed Party and upon the effectiveness of such termination, Guarantor shall have no further liability hereunder, except as provided in the last sentence of this paragraph. No such termination shall be effective until fifteen (15) Business Days after receipt by the Guaranteed Party of such termination notice. No such termination shall affect Guarantor's liability with respect to any obligations arising under any transaction entered into prior to the time the termination is effective, which transaction shall remain guaranteed pursuant to the terms of this Guarantee.

7. ASSIGNMENT. The Guarantor shall not assign this Guarantee without the express written consent of the Guaranteed Party. The Guaranteed Party shall be entitled to assign its rights under this Agreement in its sole discretion.

8. NOTICE. Any Payment Demand, to the Guaranteed Party or the Guarantor notice, request, instruction, correspondence or other document to be given hereunder by any party to another (herein collectively called "Notice") shall be in writing and delivered personally or mailed by certified mail, postage prepaid and return receipt requested, or by telegram or telecopier, as follows:

To [Name of Guaranteed Party] \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
Attn: \_\_\_\_\_  
Fax No.: ( ) \_\_\_\_\_

To Guarantor: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
Attn: \_\_\_\_\_  
Fax No.: ( ) \_\_\_\_\_

Notice given by personal delivery or mail shall be effective upon actual receipt. Notice given by telegram or telecopier shall be effective upon actual receipt if received during the recipient's normal business hours, or at the beginning of the recipient's next business day after receipt if not received during the recipient's normal business hours. All Notices by telegram or telecopier shall be confirmed promptly after transmission in writing by certified mail or personal delivery. Any party may change any address to which Notice is to be given to it by giving notice as provided above of such change of address.

8. MISCELLANEOUS. THIS GUARANTEE SHALL IN ALL RESPECTS BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF [State], WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAWS. This Guarantee shall be binding upon Guarantor, its successors and assigns and inure to the benefit of and be enforceable by the Guaranteed Party, its successors and assigns. The Guarantee embodies the entire agreement and understanding between Guarantor and the Guaranteed Party and supersedes all prior agreements and understandings relating to the subject matter hereof. The headings in this Guarantee are for purposes of reference only, and shall not affect the meaning hereof. This Guarantee may be executed in any number of counterparts, each of which shall be an original, but all of which together shall constitute one instrument.

EXECUTED as of the day and year first above written. |

[\_\_\_\_\_] \_\_\_\_\_  
By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

**EXHIBIT C**  
**SAMPLE FORM FOR CONFIRMATION**

**1. Transaction Specific Agreements**

The undersigned Parties agree to sell and purchase electric energy, or a Physically-Settled Option, pursuant to the WSPP Agreement as it is supplemented and modified below:

- (a) Seller: \_\_\_\_\_
- (b) Purchaser: \_\_\_\_\_
- (c) Period of Delivery: From   \  \   To   \  \
- (d) Schedule (Days and Hours): \_\_\_\_\_
- (e) Delivery Rate: \_\_\_\_\_
- (f) Delivery Point(s): \_\_\_\_\_
- (g) Type of Service (Check as Applicable)
  - Service Schedule A \_\_\_\_\_
  - Service Schedule B \_\_\_\_\_
  - Service Schedule C \_\_\_\_\_
  - Physically-Settled Option Service Schedule B \_\_\_\_\_
  - Physically-Settled Option Service Schedule C \_\_\_\_\_
  - Other products per Section 32.6 \_\_\_\_\_ **[Describe Product]**
- (h) Contract Quantity: \_\_\_\_\_ Total MWhrs.
- (i) Contract or Strike Price: \_\_\_\_\_
- (j) Transmission Path for the Transaction (If Applicable): \_\_\_\_\_
- (k) Date of Agreement if different: \_\_\_\_\_
- (l) Additional Information for Physically-Settled Options
  - (i) Option Type: *Put* \_\_\_\_\_ *Call* \_\_\_\_\_
  - (ii) Option Style: \_\_\_\_\_
  - (iii) Exercise Date or Period: \_\_\_\_\_
  - (iv) Premium: \_\_\_\_\_
  - (v) Premium Payment Date: \_\_\_\_\_
  - (vi) Method for providing notice of exercise \_\_\_\_\_
- (m) Special Terms and Exceptions:  
See Attachment A

[Special Terms and Exceptions shall be shown on an Attachment to this Confirmation.]

\_\_\_\_\_  
Name of Trader for Purchaser

\_\_\_\_\_  
Name of Trader for Seller

\_\_\_\_\_  
Authorized Signature  
for Purchaser

\_\_\_\_\_  
Authorized Signature  
for Seller

---

Date

---

Date

## EXHIBIT D

### WSPP MEDIATION AND ARBITRATION PROCEDURES

#### I. MEDIATION

- A. **Informal Mediation.** WSPP members with a dispute or a potential dispute involving transactions under the WSPP Agreement may request non-binding, informal mediation by contacting the WSPP's General Counsel and by providing a brief explanation in writing of the dispute and the remedy being sought. All parties to the dispute must request this Informal Mediation for it to become effective. After this contact, a telephonic conference call will be arranged among the affected WSPP members and the WSPP's General Counsel, the Chairman of the Operating Committee, and/or some other independent and knowledgeable person requested by the Chairman of the Operating Committee to participate. The purpose of the conference call will be to discuss the issues and to have an independent person or persons state their views. Best efforts will be made to set up this conference call within five Business Days after the WSPP's General Counsel is contacted subject to accommodating the schedules of all involved. This Informal Mediation shall be considered as satisfying the Mediation requirements of Section 34.1 of the WSPP Agreement.
- B. **Initiating Formal Mediation.** A WSPP member which believes that it possesses a claim against another WSPP member relating to a WSPP transaction, which is unable to resolve the dispute through agreement with the other member to the transaction, and which desires to pursue that claim shall initiate non-binding formal mediation pursuant to Section 34.1 of the WSPP Agreement. The member

initiating such mediation shall do so by Serving written notice to the Chairman of the WSPP Operating Committee, the WSPP's General Counsel, and the other members against which the claim is directed. Such notice shall state the nature of the dispute, the remedy sought, and support the claim.

- C. **Response to Document Initiating Formal Mediation.** Within eight days, the member or members against which the claim is directed may provide a response to the notice which shall be Served on the member which initiated the Mediation, the Chairman of the WSPP's Operating Committee, and the WSPP's General Counsel.
- D. **Choosing the Mediator.** The Mediator shall be chosen in accordance with the procedures set forth in Section 34.1 of the WSPP Agreement. Each Party may suggest persons to be included on the list of Mediators to be presented to the Parties provided that these suggested persons shall be provided to the WSPP Representative together with relevant personal histories within two Business Days of the date by which time the list of Mediators is to be sent out. The WSPP Representative shall allow at least one person suggested by each Party to be added to the list of Mediators. A brief personal history of each person on the list of potential mediators shall be provided to the Parties, with that history showing the person's employment over the last five years and any other relevant facts. The WSPP Representative shall provide the Parties with the list of Mediators within five days of receipt of notice of the dispute. The Parties then shall have five days in which to reach agreement on a Mediator or inform the WSPP Representative that they were unable to reach agreement in which event the WSPP

Representative shall appoint the Mediator consistent with Section 34.1 of the WSPP Agreement. Upon request of the Parties for expedition, the WSPP Representative shall use best efforts to expedite this process.

- E. **Location for the Formal Mediation.** The Parties shall agree on a location for the Mediation. If the Parties fail to reach agreement, then the WSPP Representative shall set the location which shall be convenient for the Parties and the Mediator.
- F. **Time for the Formal Mediation.** The Parties shall agree on the time for the Mediation after consultation with the Mediator if one has been appointed. If the Parties fail to reach agreement, then the WSPP Representative shall set the time which shall not be more than twenty-one days after the notice initiating the Mediation is received after consultation with the Parties and any Mediator.
- G. **Conduct of the Formal Mediation.** The Mediator shall have the ability to conduct the Mediation in any manner which the Mediator believes is appropriate to facilitate resolution of the dispute. Each Party shall have at least one representative with the authority to settle the dispute present at the Mediation. The Mediation shall be private and confidential and the Mediator shall have the authority to exclude any person not directly involved unless the Parties agree otherwise in writing. At the Mediation, each Party shall have the right to make a brief presentation of its case and to question the other Party. Each Party also may be represented by counsel.
- H. **Replacement of the Mediator.** If the Mediator resigns, withdraws or is no longer able to serve, then the Parties shall have two Business Days in which to

agree on a new Mediator. If the Parties are unable to agree within such time, the WSPP Representative shall appoint a replacement Mediator from the list used to select the first Mediator within two Business Days after being notified that the Parties are unable to agree. The dates and deadlines in this section may require modification if the mediator is replaced. Any extensions shall be as limited as possible.

## II. ARBITRATION

- A. **Initiating Arbitration.** A WSPP member which initiates Arbitration pursuant to Section 34.2 of the WSPP Agreement shall do so by Serving the Chairman of the WSPP Operating Committee, the WSPP General Counsel and the members against which the claim is directed with written notice of its demand for arbitration. Such notice shall state the nature of the dispute, the remedy sought, and support the claim.
- B. **Response.** Within ten days of receipt of the notice, any member or members against which the claim is directed may provide a response to the notice. Such response must include any counterclaims which the member believes are appropriate. If a counterclaim is submitted, then the member which submitted the notice may respond to the counterclaim within ten days of receipt. All such responses shall be Served on the Parties, the Chairman of the WSPP Operating Committee, and the WSPP General Counsel.
- C. **Choosing the Arbitrator.** The Arbitrator shall be chosen in accordance with the procedures set forth in Section 34.2 of the WSPP Agreement. Each Party may suggest persons to be included on the list of Arbitrators to be presented to the



Parties provided that these suggested persons are provided to the WSPP Representative together with relevant personal histories within two business days of the date by which time the list of Arbitrators is to be sent out. The WSPP Representative shall allow at least one person suggested by each Party to be added to the list of potential Arbitrators. A brief personal history of each person on the list of potential Arbitrators shall be provided to the Parties, with that history showing the person's employment over the last five years and any other relevant facts. The WSPP Representative shall provide the Parties with the list of Arbitrators within seven days of receipt of notice of the request for Arbitration. The Parties then shall have ten days in which to reach agreement on the Arbitrator or to inform the WSPP Representative that they were unable to reach agreement in which event the WSPP Representative shall appoint the Arbitrator consistent with Section 34.2 of the Agreement. Upon request of the Parties for expedition, the WSPP Representative shall use best efforts to cause this process to be expedited.

- D. **Location for the Arbitration.** The Parties shall agree on a location for the Arbitration. If the Parties fail to reach agreement, then the WSPP Representative shall set the location which shall be convenient for the Parties and the Arbitrator.
- E. **Time for the Arbitration.** The Parties shall agree on the time for the Arbitration and coordinate that time with the Arbitrator if one has been agreed to or appointed. If the Parties fail to reach agreement, then the WSPP Representative shall set the time which shall not be more than 60 days after the notice is received.

The WSPP Representative shall set a time after consultation with the Parties and the Arbitrator to check their schedules.

- F. **Discovery.** After appointment of the Arbitrator, each Party shall be entitled to obtain relevant documents from the other Parties and to take depositions. Each Party shall respond to such a document request within seven days of receipt of the request and make its employees or consultants available for depositions to the extent that the employee or consultant possesses knowledge and information relevant to the dispute. Each Party shall disclose documents that are confidential or commercially sensitive subject to a reasonable protective order. Any disputes concerning discovery shall be promptly referred to the Arbitrator who shall have authority to resolve such disputes, including the authority to require attendance of witnesses at depositions. The Federal Rules of Civil Procedure shall apply to discovery under these procedures.
- G. **Conduct of Arbitration if the Parties Agree to Waive an Oral Hearing.** If the Parties agree to waive an oral hearing, then the Parties shall Serve Initial Briefs no later than 35 days after the notice is received or notify the Arbitrator that they do not wish to submit any additional documents. Parties shall Serve any Reply Briefs no later than ten days after the date for Service of Initial Briefs.
- H. **Conduct of the Arbitration Hearing.** No later than fifteen days before any hearing, any Party may Serve an Initial Brief or notify the Arbitrator that they do not wish to submit any additional documents. A Party shall Serve any Reply Brief no later than five Business Days before any hearing. The Arbitrator shall preside over any hearing and rule on all objections including objections as to the

admissibility of evidence or whether the questioning is proper. All testimony shall be submitted under oath. The Arbitrator is not bound to follow any particular rules governing the conduct of the proceeding. The Arbitrator may rely on legal advice provided through the WSPP. The Arbitrator may require any person employed by a Party to attend and testify at the hearing. Each Party shall possess the right to present evidence, including witnesses, and to cross-examine other Parties' witnesses. The Arbitration shall be private and the Arbitrator shall have the authority to exclude any person not directly involved unless the Parties otherwise agree. Each Party may be represented by counsel. A stenographic record of the Arbitration shall be kept.

- I. **Decision.** Within ten Business Days after the end of the Arbitration hearing, the Arbitrator shall issue his award in writing. If the Parties waived the right to an oral hearing, then the Arbitrator shall issue the award within ten Business Days of the last date Briefs were to be submitted. The Arbitrator is not limited in the remedies he may order so long as any arbitration award is consistent with the provisions and limitations of the WSPP Agreement and any applicable Confirmation with respect to the liability and damages of any Party; provided, however, upon agreement of the Parties to the dispute, the Arbitrator's choice of remedies may be limited.
- J. **Replacement of the Arbitrator.** If the Arbitrator resigns, withdraws, or is no longer able to serve then the Parties shall have two Business Days in which to agree on a new Arbitrator. If the Parties are unable to agree within such time, the WSPP Representative shall appoint a replacement Arbitrator from the list used to

select the first Arbitrator within two Business Days after being notified that the Parties are unable to agree. The dates and deadlines in this section may require modification if the mediator is replaced. Any extensions shall be as limited as possible.

### **III. MISCELLANEOUS**

- A. **Confidentiality.** Any Arbitration or Mediation shall be confidential as provided in Section 34.4 of the WSPP Agreement.
- B. **Costs.** Costs shall be borne by Parties as provided in Section 34.3 of the WSPP Agreement.
- C. **Restrictions on Lawsuits.** Each Party shall be subject to the restrictions provided in Section 34.2 of the WSPP Agreement.
- D. **Attorney-Client/Attorney Workproduct.** The Arbitrator or Mediator shall not take any action which would result in disclosure of information in violation of the attorney-client privilege or attorney workproduct doctrine.

### **IV. DEFINITIONS**

- A. **Arbitrator or Arbitration.** The Arbitrator appointed pursuant to these procedures and Section 34.2 of the WSPP Agreement and the Arbitration pursuant to these procedures and the WSPP Agreement.
- B. **Initial or Reply Briefs.** Written documents submitted by the Parties to support their positions and respond to each others' positions. Such documents shall be limited to 25 pages.
- C. **Business Days.** Defined as in the WSPP Agreement.

- D. **Mediator or Mediation.** The Mediator appointed pursuant to these procedures and Section 34.1 of the WSPP Agreement and the Mediation pursuant to these procedures and the WSPP Agreement.
- E. **Parties.** The WSPP members involved in the Mediation or Arbitration which have a direct interest in the dispute.
- F. **Service, Serving, or Served.** The method of service shall be by fax, unless impracticable because of the size of the document. In all events, the document should be delivered to the Party by overnight mail. Parties also should attempt to send the document out by email if possible. Service will be accomplished to a Party if sent to the Party's contact person for the disputed transaction. If there are multiple contact persons for one Party, service to one such person shall suffice. Service shall be to those individuals or entities specified in this procedures, but must include service to the Parties, the Mediator or Arbitrator (if either has been appointed), and to the WSPP General Counsel.
- G. **WSPP Representative.** The Chairman of the WSPP Operating Committee or his or her designee for the purposes of the Arbitration or Mediation.

## SERVICE SCHEDULE A

### ECONOMY ENERGY SERVICE

#### A-1 PARTIES:

This Service Schedule is agreed upon as a part of this Agreement by the Parties.

#### A-2 PURPOSE:

The purpose of this Service Schedule is to define additional specific procedures, terms and conditions for requesting and providing Economy Energy Service.

#### A-3 TERMS:

A-3.1 A Party may schedule Economy Energy Service from another Party by mutual agreement; provided, however, that each Party shall be the sole judge as to the extent to and the conditions under which it is willing to provide or receive such service hereunder consistent with statutory requirements and contractual commitments including the Agreement and any applicable Confirmation.

A-3.2 Scheduling of Economy Energy Service hereunder shall be a responsibility of the Parties involved.

A-3.3 Each Seller/Purchaser may prepare a daily estimate of the amount of Economy Energy Service that it is willing and able to sell/buy each hour and the associated hourly sale/purchase price for the next Business Day, plus the weekend and holidays, and communicate this information to all other Parties via the Hub.

A-3.4 Purchasers shall arrange purchases directly with Sellers, and shall be responsible for transmission arrangements.

A-3.5 Unless otherwise mutually agreed between the Purchaser and the Seller, all Economy Energy Service transactions shall be pre-scheduled, and billings shall be

based on amounts and prices agreed to in advance by schedulers, subject to Paragraphs A-3.6 and 3.7 and subject to change by mutual agreement between dispatchers or schedulers due to system changes.

A-3.6 The price for Economy Energy Service shall be mutually agreed to in advance between Seller and Purchaser and shall not be subject to the rate caps specified in Section A-3.7 in either of the following two circumstances:

- (1) where the Seller is a FERC regulated public utility and that Seller has been authorized to sell power like that provided for under this Service Schedule at market-based rates; or
- (2) where the Seller is not a FERC regulated public utility.

A Party is a FERC regulated public utility if it is a "public utility" as defined in Section 201(e) of the Federal Power Act, 16 U.S.C. § 824(e).

A-3.7 Except as provided for in Section A-3.6, the price shall not exceed the Seller's forecasted Incremental Cost plus up to: \$7.32/kW/ month; \$1.68/kW/week; 33.78¢/kW/day; 14.07 mills/kWh; or 21.11 mills/kWh for service of sixteen (16) hours or less per day. The hourly rate is capped at the Seller's forecasted Incremental Cost plus 33.78¢/kW/ day. The total demand charge revenues in any consecutive seven-day period shall not exceed the product of the weekly rate and the highest demand experienced on any day in the seven-day period. In lieu of payment, such Parties may mutually agree to exchange economy energy at a ratio not to exceed that ratio provided for in Section C-3.6 of Service Schedule C. The Seller's forecasted Incremental Cost discussed above also may include any transmission and/or ancillary service costs associated with the sale, including the cost of any

transmission and/or ancillary services that the Seller must take on its own system. Any such transmission and/or ancillary services charges shall be separately identified by the Seller to the Purchaser for transactions under this Schedule including the exchange of economy energy. The transmission and ancillary service rate ceilings shall be available through the WSPP's Hub or homepage. Any such transmission services (and ancillary service provided in conjunction with such transmission service) by Seller shall be provided pursuant to any applicable transmission tariff or agreement, and the rates therefore shall be consistent with such tariff or agreement. The foregoing hourly rate caps (i) are subject to the submission of cost justification by the applicable Seller to the FERC, and acceptance by FERC thereof, under Western Systems Power Pool, 122 FERC ¶ 61,139 (2008), or (ii) are inapplicable, in the event that the Seller has filed with FERC, and FERC has accepted, a rate schedule applicable solely to such Seller, which rate schedule has been, upon the request of the applicable Seller, incorporated into this Agreement at Schedule "Q" hereof (such incorporation to occur upon Seller's request without approval of the WSPP Executive Committee).

A-3.8 Unless otherwise agreed, the Purchaser shall be responsible for maintaining operating reserve requirements as back-up for Economy Energy Service purchased and the Seller shall not be required to maintain such operating reserve.

A-3.9 Each Party that is a FERC regulated public utility as defined in A-3.6 shall file the Confirmation with FERC for each transaction under this Service Schedule with a term in excess of one year no later than 30 days after service begins if that Party would have been required to file such Confirmation or similar agreements with



FERC under an applicable FERC accepted market based rate schedule.

**SERVICE SCHEDULE B**  
**UNIT COMMITMENT SERVICE**

**B-1 PARTIES:**

This Service Schedule is agreed upon as part of this Agreement by the Parties.

**B-2 PURPOSE:**

The purpose of this Service Schedule is to define additional specific procedures, terms, and conditions for requesting and providing Unit Commitment Service.

**B-3 TERMS:**

B-3.1 A Party may schedule Unit Commitment Service from another Party by mutual agreement; provided, however, that each Party shall be the sole judge as to the extent to and the conditions under which it is willing to provide or receive such service hereunder consistent with statutory requirements and contractual commitments including the Agreement and any applicable Confirmation. Once an agreement is reached, then the obligation for Unit Commitment Service becomes a firm commitment, for both Parties, for the agreed capacity and terms.

B-3.2 Unless otherwise mutually agreed by the Parties involved in a Unit Commitment Service transaction, the terms set forth in this Service Schedule B shall govern such transaction.

B-3.3 Unless otherwise agreed between the Purchaser and the Seller, all transactions shall be prescheduled, subject to any conditions agreed to by schedulers, for a specified unit for a specified period of time.

B-3.4 Purchasers shall arrange purchases directly with Sellers.

B-3.5 The price for Unit Commitment Service shall be mutually agreed to in advance between Seller and Purchaser and shall not be subject to the rate caps specified in

Section B-3.6 in either of the following two circumstances:

- (1) where the Seller is a FERC regulated public utility and that Seller has been authorized to sell power like that provided for under this Service Schedule at market-based rates; or
- (2) where the Seller is not a FERC regulated public utility.

A Party is a FERC regulated public utility if it is a "public utility" as defined in Section 201(e) of the Federal Power Act, 16 U.S.C. § 824(e).

B-3.6 Except as provided for in Section B-3.5, the price shall not exceed the Seller's forecasted Incremental Cost plus up to: \$7.32/kW/month; \$1.68/kW/week; 33.78¢/kW/day; 14.07 mills/kWh; or 21.11 mills/kWh for service of sixteen (16) hours or less per day. The hourly rate is capped at the Seller's forecasted Incremental Cost plus 33.78¢/kW/day. The total demand charge revenues in any consecutive seven-day period shall not exceed the product of the weekly rate and the highest demand experienced on any day in the seven-day period. The Seller's forecasted Incremental Cost discussed above also may include any transmission and/or ancillary service costs associated with the sale, including the cost of any transmission and/or ancillary services that the Seller must take on its own system. Any such transmission and/or ancillary service charges shall be separately identified by the Seller to the Purchaser. The transmission and ancillary service rate ceilings shall be available through the WSPP's Hub or homepage. The foregoing hourly rate caps (i) are subject to the submission of cost justification by the applicable Seller to the FERC, and acceptance by FERC thereof, under Western Systems Power Pool, 122 FERC ¶ 61,139 (2008), or (ii) are inapplicable, in the event that the Seller has

filed with FERC, and FERC has accepted, a rate schedule applicable solely to such Seller, which rate schedule has been, upon the request of the applicable Seller, incorporated into this Agreement at Schedule "Q" hereof (such incorporation to occur upon Seller's request without approval of the WSPP Executive Committee).

B-3.7 Start-up costs and no-load costs if included by the Seller shall be stated separately in the price.

B-3.8 Energy schedules for the Purchaser's share of a unit may be modified by the Purchaser with not less than a thirty (30) minute notice before the hour in which the change is to take place, unless otherwise mutually agreed or unforeseen system operating conditions occur.

B-3.9 Unit Commitment Service is intended to have assured availability; however, scheduled energy deliveries may be interrupted or curtailed as follows:

- (a) By the Seller by giving proper recall notice to the Purchaser if the Seller and the Purchaser have mutually agreed to recall provisions,
- (b) By the Seller when all or a portion of the output of the unit is unavailable, by an amount in proportion to the amount of the reduction in the output of the unit, unless otherwise agreed by the schedulers,
- (c) By the Seller to prevent system separation during an emergency, provided the Seller has exercised all prudent operating alternatives prior to the interruption or curtailment,
- (d) Where applicable, by the Seller to meet its public utility or statutory obligations to its customers, or
- (e) By either the Seller or the Purchaser due to the unavailability of transmission

capacity necessary for the delivery of scheduled energy.

B-3.10 Each Party that is a FERC regulated public utility as defined above in B-3.5 shall file the Confirmation with FERC for each transaction under this Service Schedule with a term in excess of one year no later than 30 days after service begins if that Party would have been required to file such Confirmation or similar agreements with FERC under an applicable FERC accepted market based rate schedule.

**B-4 BILLING AND PAYMENT PROVISIONS:**

B-4.1 Except as provided in Sections B-4.2 and B-5, billing for Unit Commitment Service shall be computed based upon the agreed upon prices.

B-4.2 In the event the Seller requests recall of Unit Commitment Service in a shorter time frame than was mutually agreed pursuant to Section B-3.9(a) and the Purchaser agrees to allow such recall, the Purchaser shall be relieved of any obligation to pay start-up costs.

**B-5 TERMINATION PROVISION:**

In the event Unit Commitment Service is curtailed or interrupted except as provided in Section B-3.9(a), the Purchaser shall have the option to cancel the Unit Commitment Service at any time by paying the Seller for (i) all energy deliveries scheduled up to the notice of termination and (ii) all separately stated start-up and no-load costs.

**SERVICE SCHEDULE C**  
**FIRM CAPACITY/ENERGY SALE OR EXCHANGE SERVICE**

C-1 PARTIES:

This Service Schedule is agreed upon as a part of this Agreement by the Parties.

C-2 PURPOSE:

The purpose of this Service Schedule is to define additional specific procedures, terms, and conditions for requesting and providing Firm Capacity/Energy Sale or Exchange Service.

C-3 TERMS:

C-3.1 A Party may schedule Firm Capacity/Energy Sale or Exchange Service from another Party by mutual agreement; provided, however, that each Party shall be the sole judge as to the extent to and the conditions under which it is willing to provide or receive such service hereunder consistent with statutory requirements and contractual commitments including the Agreement and any applicable Confirmation. Once an agreement is reached, then the obligation for Firm Capacity/Energy Sale or Exchange Service becomes a firm commitment, for both Parties, for the agreed service and terms.

C-3.2 Unless otherwise agreed between the Purchaser and the Seller, all transactions shall be prescheduled, subject to any conditions agreed to by schedulers.

C-3.3 Firm capacity transactions shall include buying, selling, or exchanging capacity between Parties with or without associated energy. A firm capacity sale or exchange is a commitment, in accordance with the terms and conditions specified in the Confirmation, of capacity resources.

C-3.4 Firm energy transactions shall include buying, selling, or exchanging firm energy between Parties in accordance with the terms and conditions specified in the Confirmation.

C-3.5 The price for Firm Capacity/Energy Sale or Exchange Service shall be mutually agreed to in advance between Seller and Purchaser and shall not be subject to the rate caps specified in Section C-3.6 in either of the following two circumstances:

- (1) where the Seller is a FERC regulated public utility and that Seller has been authorized to sell power like that provided for under this Service Schedule at market-based rates; or
- (2) where the Seller is not a FERC regulated public utility.

A Party is a FERC regulated public utility if it is a "public utility" as defined in Section 201(e) of the Federal Power Act, 16 U.S.C. § 824(e).

C-3.6 Except as provided for in Section C-3.5, the price shall not exceed the Seller's forecasted Incremental Cost plus up to: \$7.32/kW/month; \$1.68/kW/week; 33.78¢/kW/day; 14.07 mills/kWh; or 21.11 mills/kWh for service of sixteen (16) hours or less per day. The hourly rate is capped at the Seller's forecasted Incremental Cost plus 33.78¢/kW/day. The total demand charge revenues in any consecutive seven-day period shall not exceed the product of the weekly rate and the highest demand experienced on any day in the seven-day period. Exchange ratios among such Parties shall be as mutually agreed between the Purchaser and the Seller, but shall not exceed the ratio of 1.5 to 1.0. The Seller's forecasted Incremental Cost discussed above also may include any transmission and/or ancillary service costs associated with the sale, including the cost of any

transmission and/or ancillary services that the Seller must take on its own system. Any such transmission and/or ancillary service charges shall be separately identified by the Seller to the Purchaser for transactions under this Schedule including exchanges. The transmission and ancillary service rate ceiling shall be available through the WSPP's Hub or homepage. Any such transmission service (and ancillary services provided in conjunction with such transmission service) by Seller shall be provided pursuant to any applicable transmission tariff or agreement, and the rates therefore shall be consistent with such tariff or agreement. The foregoing hourly rate caps (i) are subject to the submission of cost justification by the applicable Seller to the FERC, and acceptance by FERC thereof, under Western Systems Power Pool, 122 FERC ¶ 61,139 (2008), or (ii) are inapplicable, in the event that the Seller has filed with FERC, and FERC has accepted, a rate schedule applicable solely to such Seller, which rate schedule has been, upon the request of the applicable Seller, incorporated into this Agreement at Schedule "Q" hereof (such incorporation to occur upon Seller's request without approval of the WSPP Executive Committee).

C-3.7 Firm Capacity/Energy Sale or Exchange Service shall be interruptible only if the interruption is: (a) within any recall time or allowed by other applicable provisions governing interruptions of service under this Service Schedule, as may be mutually agreed to by the Seller and the Purchaser, (b) due to an Uncontrollable Force as provided in Section 10 of this Agreement; or (c) where applicable, to meet Seller's public utility or statutory obligations to its customers; provided, however, this paragraph (c) shall not be used to allow interruptions for reasons other than



reliability of service to native load. If service under this Service Schedule is interrupted under Section C-3.7(a) or (b), neither Seller nor Purchaser shall be obligated to pay any damages under this Agreement or Confirmation. If service under this Service Schedule is interrupted for any reason other than pursuant to Section C-3.7(a) or (b), the Non-Performing Party shall be responsible for payment of damages as provided in Section 21.3 of this Agreement or in any Confirmation.

C-3.8 Each Party that is a FERC regulated public utility as defined in Section C-3.5 shall file the Confirmation with FERC for each transaction under this Service Schedule with a term in excess of one year no later than 30 days after service begins if that Party would have been required to file such Confirmation or similar agreements with FERC under an applicable FERC accepted market based rate schedule.

C-3.9 Seller shall be responsible for ensuring that Service Schedule C transactions are scheduled as firm power consistent with the most recent rules adopted by the applicable NERC regional reliability council.

**SERVICE SCHEDULE D**  
**OPERATING RESERVE – SPINNING**  
**AND**  
**OPERATING RESERVE – SUPPLEMENTAL**

**D-1 PURPOSE**

This Service Schedule specifies procedures, terms and conditions pursuant to which the Seller provides Operating Reserve – Spinning and/or Operating Reserve – Supplemental, as specified in the Confirmation, to enable the Designated Authority to meet a reserve obligation or to resell as ancillary services under an OATT.

**D-2 DEFINITIONS AND RULES ABOUT THIS SERVICE SCHEDULE**

D-2.1 Terms used in this Service Schedule with initial capitalization which are not defined in the Agreement or this Service Schedule shall have the meanings given to them in the NERC Glossary and Applicable Standards. In addition to the definitions specified in Section 4 of the Agreement, the following definitions apply to this Service Schedule.

D-2.1.1 “Applicable Standards” means the NERC Reliability Standards and the respective reliability standards and criteria of NERC, and of any Regional Reliability Organization, Balancing Authority, and Reserve Sharing Group applicable to the Seller’s provision and the Designated Authority’s use of Operating Reserve – Spinning or Operating Reserve – Supplemental, in force as of the date of the Confirmation.

D-2.1.2 “Demand Response Resource(s)” has the meaning given in 18 C.F.R. §35.28(b)(5).

D-2.1.3 “Designated Authority” means the Regional Reliability Organization, Balancing

Authority, Reserve Sharing Group or other entity designated in the Confirmation, which shall have a right to apply the applicable Reserve to the quantity of Reserve it is required to maintain, and to use such Reserve in accordance with the Applicable Standards. The Designated Authority and the Purchaser may be the same entity or two different entities. If the Designated Authority and the Purchaser are the same entity, then the Designated Authority shall also be the Purchaser for all purposes under the Agreement.

D-2.1.4 “Good Utility Practice” means any of the practices, methods, and acts engaged in or approved by a significant portion of the electric utility industry during the applicable time period in the applicable region, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision in question was made, could have been expected to accomplish the desired result in a manner that: (a) is consistent with the Applicable Standards; (b) gives due consideration to reliability, safety and protection of equipment and the public welfare; and (c) is consistent with good business practices, reliability, safety, and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method or act, or the exclusion of all other practices, but rather to be a range of acceptable practices, methods, or acts generally accepted in the region.

D-2.1.5 “NERC Glossary” means the NERC Glossary of Terms Used in Reliability Standards.

D-2.1.6 “Non-Performance” with respect to Seller shall have the meaning given in Section D-4.1, and with respect to Purchaser, the meaning given in Section D-

4.2.

D-2.1.7 “OATT” refers to the Open Access Transmission Tariff of the Designated Authority or, if the Designated Authority has no OATT, the pro forma Open Access Transmission Tariff of the FERC.

D-2.1.8 “OATT Schedule” refers to schedule 5 or 6 of the OATT for sale of ancillary services, or any other schedule under an OATT for sale of Operating Reserve – Spinning or Operating Reserve – Supplemental.

D-2.1.9 “Operating Reserve – Spinning” shall have the meaning given in the NERC Glossary of Terms and the Applicable Standards, and is the product transacted under schedule 5 or similar schedule under an OATT.

D-2.1.10 “Operating Reserve – Supplemental” shall have the meaning given in the NERC Glossary of Terms and the Applicable Standards, and is the product transacted under schedule 6 or similar schedule under an OATT.

D-2.2 The following rules apply to this Service Schedule.

D-2.2.1 In the event of inconsistency between the definition in the NERC Glossary of Terms and the Applicable Standards, the Applicable Standards shall control.

D-2.2.2 No product sold or transferred under this Service Schedule D shall include reactive supply and voltage control service, or Regulation and Frequency Response service.

D-2.2.3 The OATT, OATT Schedules, regulations of the FERC, the NERC Glossary, and Applicable Standards shall be applied in their forms as of the date of the Confirmation.

D-3 TERMS OF SERVICE

D-3.1 Each Confirmation entered into under this Service Schedule shall contain the following information, and may contain other terms and conditions to which the Parties agree:

- (a) A prominent designation of the service, Operating Reserve – Spinning and/or Operating Reserve – Supplemental, to which the Confirmation applies;
- (b) Identification of the Designated Authority and if the Designated Authority is not a Regional Reliability Organization, the Regional Reliability Organization within which the Designated Authority is electrically located;
- (c) The Standard Confirmation Provisions, as applicable;
- (d) Any additional attributes of the Operating Reserve – Spinning or Operating Reserve – Supplemental, as the Parties may agree;
- (e) The means by which requests for energy required to be delivered under the Service Schedule shall be communicated; and
- (f) Any conditions to the effectiveness of the Confirmation, including, for example, the completion of any arrangements or agreements between the Seller and the Designated Authority or among the Seller, Designated Authority, and Purchaser.

D-3.2 Contract Price. The Contract Price may include separately stated charges for capacity and energy, and any agreements concerning transmission arrangements and payment obligations.

D-3.3 Seller shall provide Operating Reserve – Spinning or Operating Reserve – Supplemental, as applicable, to the Designated Authority in conformity with the Applicable Standards and any additional attributes specified in the Confirmation as are consistent with the Applicable Standards. Seller shall provide such service from one or more generation resources or Demand Response Resources. Such resources must be physically and

operationally available to respond within the time periods, and in conformance with other technical and operational criteria, prescribed by, the Applicable Standards for the applicable service, and as required to conform to any additional attributes stated in the Confirmation.

#### D-3.4 Obligations Concerning Capacity and Requests for and Delivery of Energy

D-3.4.1 Seller shall provide capacity and deliver energy associated with Operating Reserve – Spinning or Operating Reserve – Supplemental, in quantities up to the applicable capacity(ies) specified in the Confirmation for the applicable hour(s), as and when the Designated Authority requests such delivery in the manner of request specified in the Confirmation and in accordance with Section D-3.4.2.

D-3.4.2 The Designated Authority shall use the capacity and energy provided by Seller under this Service Schedule for the sole purpose of satisfying the Designated Authority's own obligations pertaining to Operating Reserve – Spinning and Operating Reserve – Supplemental, as specified in the Applicable Standards or the Confirmation. Purchaser shall ensure that the Designated Authority shall not require Seller to deliver energy under this Service Schedule except as and when the Designated Authority determines, in its good faith discretion reasonably exercised in accordance with Good Utility Practice or such other criteria as may be stated in the Confirmation, that such energy is required to enable it to respond to a contingency or other event for which the service specified in the Confirmation is permitted to be utilized under the Applicable Standards or as otherwise stated in the Confirmation.

D-3.5 Inspection and Audit. The Purchaser and Designated Authority shall have the right, to

conduct such inspections and audits of Seller's records as are reasonable to assure that the Seller's provision of services under this Service Schedule and Confirmation conforms to the Applicable Standards and the Confirmation. The Seller shall have the right to conduct inspections and audits of the Designated Authority's records as reasonably required to assure that any use by the Designated Authority of the services under this Service Schedule and Confirmation conformed to Section D-3.4.2 and the Confirmation. The Parties may state further details and conditions in the Confirmation concerning these rights, including, for example, provisions concerning confidentiality or limiting inspection to an agreed third-party auditor.

#### D-3.6 Regulatory Matters – Rate Caps

D-3.6.1 The price for Operating Reserve – Spinning or Operating Reserve – Supplemental shall not be subject to the rate caps specified in Section D-3.6.2 in either of the following two circumstances:

- (1) where the Seller is a FERC regulated public utility and that Seller has been authorized to sell power like that provided for under this Service Schedule at market-based rates; or
- (2) where the Seller is not a FERC regulated public utility.

A Party is a FERC regulated public utility if it is a "public utility" as defined in Section 201(e) of the Federal Power Act, 16 U.S.C. § 824(e).

D-3.6.2 Except as provided for in Section D-3.6.1, the price shall not exceed the Seller's forecasted Incremental Cost plus up to: \$7.32/kW/month; \$1.68/kW/week; 33.78¢/kW/day; 14.07 mills/kWh; or 21.11 mills/kWh for service of sixteen (16) hours or less per day. The hourly rate is capped at the Seller's forecasted

Incremental Cost plus 33.78¢/kW/day. The total demand charge revenues in any consecutive seven-day period shall not exceed the product of the weekly rate and the highest demand experienced on any day in the seven-day period. Exchange ratios among such Parties shall be as mutually agreed between the Purchaser and the Seller, but shall not exceed the ratio of 1.5 to 1.0. The Seller's forecasted Incremental Cost discussed above also may include any transmission and/or ancillary service costs associated with the sale, including the cost of any transmission and/or ancillary services that the Seller must take on its own system. Any such transmission and/or ancillary service charges shall be separately identified by the Seller to the Purchaser for transactions under this Schedule including exchanges. The transmission and ancillary service rate ceiling shall be available through the WSPP's Hub or homepage. Any such transmission service (and ancillary services provided in conjunction with such transmission service) by Seller shall be provided pursuant to any applicable transmission tariff or agreement, and the rates therefore shall be consistent with such tariff or agreement. The foregoing hourly rate caps (i) are subject to the submission of cost justification by the applicable Seller to the FERC, and acceptance by FERC thereof, under Western Systems Power Pool, 122 FERC ¶ 61,139 (2008), or (ii) are inapplicable, in the event that the Seller has filed with FERC, and FERC has accepted, a rate schedule applicable solely to such Seller, which rate schedule has been, upon the request of the applicable Seller, incorporated into this Agreement at Schedule "Q" hereof (such incorporation to occur upon Seller's request without approval of the WSPP Executive



Committee).

#### D-4 NON-PERFORMANCE, DAMAGES AND TERMINATION

D-4.1 Seller Non-Performance. “Non-Performance” with respect to Seller means Seller’s failure to provide capacity or deliver energy to the Designated Authority as this Service Schedule and the Confirmation require.

D-4.1.1 Purchaser Entitlement to Damages. In the event of Non-Performance by Seller, Seller shall pay damages to Purchaser calculated in accordance with Section 21.3 of the Agreement.

D-4.1.2 Purchaser Option to Terminate. Purchaser shall have an option to declare any instance of Seller’s Non-Performance under Section D-4.2 an Event of Default under the Agreement and the remedies for an Event of Default under Section 22.2(b) of the Agreement shall apply (excluding Section 22.2(a)), provided, that the right to terminate transactions for such Non-Performance shall be limited to transactions under this Service Schedule D. Exercise of the termination option under this Section D-4.1.2 shall not diminish the performing Party’s rights to collect damages for such Non-Performance under Section D-4.1.1, or to avail itself of remedies for other Events of Default.

D-4.2 Purchaser Non-Performance. “Non-Performance” with respect to the Purchaser means the Designated Authority’s failure to receive capacity and/or energy, or the Designated Authority’s use of capacity and/or energy under this Service Schedule which use does not conform to Section D-3.4.2 (such capacity and/or energy, the “unauthorized energy”).

D-4.2.1 Seller Entitlement to Damages. In the event of Non-Performance by Purchaser, Purchaser shall compensate Seller in an amount equal to the quantity of

unauthorized energy Seller was required to deliver during each hour, multiplied by the energy charge for the applicable hour.

D-4.2.2 Seller Option to Terminate. Seller shall have an option to declare any instance of Purchaser's Non-Performance under Section D-4.2 an Event of Default under the Agreement and the remedies for an Event of Default under Section 22.2(b) of the Agreement shall apply (but not Section 22.2(a)), provided that the right to terminate all transactions for such Non-Performance shall be limited to transactions under this Service Schedule D. Exercise of the termination option under this Section D-4.2.2 shall not diminish the performing Party's rights to collect damages for such Non-Performance under Section D-4.2.1, or to avail itself of remedies for other Events of Default under the Agreement.

D-4.3 Termination under Section D-4.1.2 or D-4.4.2 shall become effective immediately upon receipt by the non-performing Party of the Performing Party's written notice thereof, which notice shall specify the Non-Performance. If the Performing Party fails to exercise its termination option arising from an instance of Non-Performance under Section D-4.1.2 or D-4.2.2 within thirty (30) days following the date the option to terminate arose, then solely with respect to that instance of Non-Performance, the termination option shall cease to be available to the Performing Party.

D-4.4 Nothing in this Service Schedule shall restrict the right of either Party to avail itself of other remedies provided in the Agreement.

## SERVICE SCHEDULE E

### ENERGY IMBALANCE AND GENERATOR IMBALANCE POWER

#### E-1 PURPOSE

This Service Schedule states procedures, terms and conditions pursuant to which the Seller provides Energy Imbalance Power and Generation Imbalance Power to the Purchaser, as specified in the Confirmation, and the Purchaser receives such service to meet a reliability obligation or to resell as ancillary services under an OATT.

#### E-2 DEFINITIONS AND RULES ABOUT THIS SERVICE SCHEDULE

E-2.1 In addition to the definitions specified in Section 4 of the Agreement, the following definitions apply to this Service Schedule E.

E-2.1.1 "Balancing Power" means a service or product that can be resold as Energy Imbalance Power or Generator Imbalance Power under Schedules 4 and 9, respectively, of the OATT or other schedule under an OATT for sale of imbalance power.

E-2.1.2 "Demand Response Resource(s)" has the meaning given in 18 C.F.R. §35.28(b)(5).

E-2.1.3 "Non-Performance" with respect to Seller shall have the meaning given in Section E-4.1 and with respect to Purchaser the meaning given in Section E-4.2.

E-2.1.4 "OATT" refers to the Purchaser's Open Access Transmission Tariff approved by the FERC or, if the Purchaser has no OATT, the pro forma Open Access Transmission Tariff of the FERC.

E-2.1.5 "OATT Schedule" refers to schedule 4 or 9 of the OATT for sale of ancillary services, or any other schedule for sale of imbalance power under an OATT.

E-2.2 The following rules apply to this Service Schedule.

E-2.2.1 No product sold or transferred under this Service Schedule E shall include reactive supply and voltage control service, or Regulation and Frequency Response service.

E-2.2.2 The OATT and OATT Schedules shall be applied in their forms as of the date of the Confirmation.

### E-3 TERMS OF SERVICE

E-3.1 Each Confirmation entered into under this Service Schedule shall contain the following information, and may contain other terms and conditions to which the Parties agree:

- (a) A prominent designation of the service, Energy Imbalance and Generator Imbalance Power, to which the Confirmation applies;
- (b) The Standard Confirmation Provisions, as applicable;
- (c) Any additional attributes of the Balancing Power, as the Parties may agree;
- (d) The means by which requests for energy required to be delivered under the Service Schedule shall be communicated; and
- (e) Any conditions to the effectiveness of the Confirmation.

E-3.2 Contract Price. The Contract Price may include separately stated charges for capacity and energy, and any agreements concerning transmission arrangements and payment obligations.

E-3.3 Seller shall provide Balancing Power from one or more generation resources or Demand Response Resources. Such resources must be physically and operationally available to respond within the time periods, and in conformance with other technical and operational criteria, as may be stated in the Confirmation.

#### E-3.4 Obligations Concerning Capacity and Requests for and Delivery of Energy

E-3.4.1 Upon the requests of the Purchaser, Seller shall provide capacity and deliver energy associated with Balancing Power to the Purchaser at any rate of flow up to and including the applicable capacity(ies) and at such intervals as are specified in the Confirmation for the applicable hour(s).

E-3.4.2 Transmission must be available intra-hour, and may be arranged and scheduled in any manner that meets the requirements of the Parties.

#### E-3.5 Regulatory Matters – Rate Caps

E-3.5.1 The price for Balancing Power shall not be subject to the rate caps specified in Section E-3.5.2 in either of the following two circumstances:

- (1) where the Seller is a FERC regulated public utility and that Seller has been authorized to sell power like that provided for under this Service Schedule at market-based rates; or
- (2) where the Seller is not a FERC regulated public utility.

A Party is a FERC regulated public utility if it is a "public utility" as defined in Section 201(e) of the Federal Power Act, 16 U.S.C. § 824(e).

E-3.5.2 Except as provided for in Section E-3.5.1, the price shall not exceed the Seller's forecasted Incremental Cost plus up to: \$7.32/kW/month; \$1.68/kW/week; 33.78¢/kW/day; 14.07 mills/kWh; or 21.11 mills/kWh for service of sixteen (16) hours or less per day. The hourly rate is capped at the Seller's forecasted Incremental Cost plus 33.78¢/kW/day. The total demand charge revenues in any consecutive seven-day period shall not exceed the product of the weekly rate and the highest demand experienced on any day in the seven-day period. Exchange

ratios among such Parties shall be as mutually agreed between the Purchaser and the Seller, but shall not exceed the ratio of 1.5 to 1.0. The Seller's forecasted Incremental Cost discussed above also may include any transmission and/or ancillary service costs associated with the sale, including the cost of any transmission and/or ancillary services that the Seller must take on its own system. Any such transmission and/or ancillary service charges shall be separately identified by the Seller to the Purchaser for transactions under this Schedule including exchanges. The transmission and ancillary service rate ceiling shall be available through the WSPP's Hub or homepage. Any such transmission service (and ancillary services provided in conjunction with such transmission service) by Seller shall be provided pursuant to any applicable transmission tariff or agreement, and the rates therefore shall be consistent with such tariff or agreement. The foregoing hourly rate caps (i) are subject to the submission of cost justification by the applicable Seller to the FERC, and acceptance by FERC thereof, under Western Systems Power Pool, 122 FERC ¶ 61,139 (2008), or (ii) are inapplicable, in the event that the Seller has filed with FERC, and FERC has accepted, a rate schedule applicable solely to such Seller, which rate schedule has been, upon the request of the applicable Seller, incorporated into this Agreement at Schedule "Q" hereof (such incorporation to occur upon Seller's request without approval of the WSPP Executive Committee).

#### E-4 NON-PERFORMANCE, DAMAGES AND TERMINATION

E-4.1 Seller Non-Performance. "Non-Performance" with respect to Seller means Seller's

failure to provide capacity or deliver energy to the Purchaser as this Service Schedule and the Confirmation require.

E-4.1.1 Purchaser Entitlement to Damages. In the event of Non- Performance by Seller, Seller shall pay damages to Purchaser calculated in accordance with Section 21.3 of the Agreement.

E-4.1.2 Purchaser Option to Terminate. Purchaser shall have an option to declare any instance of Seller's Non-Performance under Section E-4.1 an Event of Default under the Agreement and the remedies for an Event of Default under Section 22.2(b) of the Agreement shall apply (excluding Section 22.2(a)), provided that the right to terminate transactions for such Non-Performance shall be limited to transactions under this Service Schedule E. Exercise of the termination option under this Section E-4.1.2 shall not diminish the performing Party's rights to collect damages for such Non-Performance under Section E-4.1.1, or to avail itself of remedies for other Events of Default.

E-4.2 Purchaser Non-Performance. "Non-Performance" with respect to Purchaser means Purchaser's failure to receive energy that it had scheduled for receipt under this Service Schedule and the Confirmation.

E-4.2.1 Seller Entitlement to Damages. In the event of Non-Performance by Purchaser, Purchaser shall pay damages to Purchaser calculated in accordance with Section 21.3 of the Agreement.

E-4.2.2 Seller Option to Terminate. Seller shall have an option to declare any instance of Purchaser's Non-Performance under Section E-4.2 an Event of Default under the Agreement and the remedies for an Event of Default under Section 22.2(b) of the

Agreement shall apply (excluding Section 22.2(a)), provided that the right to terminate transactions for such Non-Performance shall be limited to transactions under this Service Schedule E. Exercise of the termination option under this Section E-4.2.2 shall not diminish the performing Party's rights to collect damages for such Non-Performance under Section E-4.2.1, or to avail itself of remedies for other Events of Default.

E-4.3 Termination under Section E-4.1.2 or E-4.2.2 shall become effective immediately upon receipt by the non-performing Party of the Performing Party's written notice thereof, which notice shall specify the Non-Performance. If the Performing Party fails to exercise its termination option arising from an instance of Non-Performance under Section E-4.1.2 or E-4.2.2 within thirty (30) days following the date the option to terminate arose, then solely with respect to that instance of Non-Performance, the termination option shall cease to be available to the Performing Party.

E-4.4 Nothing in this Service Schedule shall restrict the right of either Party to avail itself of other remedies provided in the Agreement.



**SERVICE SCHEDULE R**  
**RENEWABLE ENERGY CERTIFICATE TRANSACTIONS**  
**WITH AND WITHOUT ENERGY**

**R-1 Introduction; Transaction Documentation; and Rules of Construction.** This Service Schedule R states terms and conditions applicable to REC Transactions entered into by Parties under the Agreement.

**R-1.1 Documentation.** Each REC Transaction shall be documented in a Confirmation. Annex 2 is a Confirmation template, which the Parties may modify and make subject to any other agreement between them. A Confirmation for a REC Transaction will be given legal effect only if a Documentary Writing.

**R-1.2 Contract Documents.** The Agreement, Service Schedule R, and the fully executed Confirmation comprise a contract for a REC Transaction. Any conflicts between or among the Agreement, Service Schedule R, and the Confirmation shall be resolved in the following order of control: first, the Confirmation; second, Service Schedule R; and third, the Agreement.

**R-1.3 Definitions.** Definitions contained in the Agreement and Annex 1 apply to this Service Schedule R. Any conflicts among definitions contained in these documents shall be resolved in accordance with Section R-1.2.

**R-1.4 Rules of Construction.**

**R-1.4.1** The Annexes of Service Schedule R are incorporated into and made a part of this Service Schedule R, as though set forth fully herein.

**R-1.4.2** The word “including” shall mean “including but not limited to.” Unless otherwise specified, the word “Section” refers to a section of this Service Schedule R and includes all subparts of the specified section.

**R-1.4.3** Subject to any legal restrictions applicable to a Party, the Parties to a REC Transaction may vary any term or condition of this Service Schedule R for that REC Transaction. Provisions in this Service Schedule R concerning such variance of terms, such as “unless otherwise agreed,” shall not prejudice the generality of the preceding sentence, provided, that the Parties shall not vary Section C-3.6 of Service Schedule C, Section B-3.6 of Service Schedule B, and Section A-3.7 of Service Schedule A.

**R-1.4.4** An Applicable Program shall be applicable to a REC Transaction only if designated expressly in the Confirmation. No rule of contract construction or interpretation, and no inference or implication, shall cause an Applicable Program that is not designated expressly in the Confirmation to be applicable to a REC Transaction.

**R-2 Confirmations; REC Products.**

**R-2.1 REC Transaction.** A “REC Transaction” is a purchase and sale of a REC separately from or bundled with Energy. A REC Transaction may be for the purchase and sale of any REC Product defined in Section R-2.3 or another REC Product the Parties may define.

**R-2.2 Confirmations.** In addition to other terms and conditions to which the Parties may agree, the Confirmation:

**R-2.2.1** must include the following terms: REC Product, Contract Quantity, Contract Price, Vintage, and Transfer Date, and whether the Environmental Attributes covered by the REC are All Attributes, Program Attributes, or other coverage the Parties may specify;

**R-2.2.2** for a bundled REC Transaction (Firm Bundled REC, Resource Contingent Bundled REC, or Facility As-Run Bundled REC), may include a single Contract Price which may be allocated between the REC and the Energy;

**R-2.2.3** must identify the Renewable Energy Facility or Renewable Energy Source if the REC Transaction is All Attributes (Section R-2.4.1) or Program Attributes (Section R-2.4.2), if a designated Applicable Program requires such identification, or if the REC Product is Resource Contingent Bundled REC or Facility As-Run Bundled REC;

**R-2.2.4** must designate an Applicable Program if the REC Transaction is Program Attributes, the Seller is to assure compliance with an Applicable Program (Sections R-5.2.1, 6.3, and 6.4), or to recover penalties and alternative compliance payments (Section R-9.1), and if the REC Transaction is All Attributes, may designate an Applicable Program (Section 2.4.1).

**R-2.3 REC Products.** A “REC Product” is any of the following defined products or other product specified in the Confirmation.

**R-2.3.1 Firm REC.** A “Firm REC” is a REC purchased and sold in a transaction that does not include the sale or purchase of energy. The Seller has a firm obligation to Deliver the REC pursuant to the Confirmation. A remedy for non-performance is available under Section R-9, except in the event and to the extent of Uncontrollable Force.

**R-2.3.2 Firm Bundled REC.** A “Firm Bundled REC” is a REC purchased and sold in a transaction that includes the purchase and sale of Energy. The Seller has a firm obligation to Deliver the REC and Energy pursuant to the Confirmation. A remedy for non-performance is available under Section R-9, except in the event and to the extent of Uncontrollable Force. The terms and conditions of Service Schedule C apply to the purchase and sale of Energy associated with a Firm Bundled REC as the Parties may modify such terms and conditions in the Confirmation, subject to the proviso stated in Section R-1.4.3. The hourly rate caps identified in Section C-3.6 of Service Schedule C shall apply, except (1) where the Seller is a FERC regulated “public utility” as defined in Section 201(e) of the Federal Power Act, 16 U.S.C. § 824(e), and that Seller has been authorized to sell power like that provided for in Service Schedule C at market-based rates; or (2) where the Seller is not such a FERC regulated “public utility.” When such hourly rate caps apply, (a) if the Contract Price is allocated between the REC and the Energy, the hourly rate caps shall apply to the Contract Price for the Energy and not the REC; and (b) if the Contract Price is not allocated between the REC and the Energy, the hourly rate caps shall apply to the bundled Contract Price.

**R-2.3.3 Resource Contingent REC.** A “Resource Contingent REC” is a REC purchased and sold in a transaction that does not include the sale or purchase of Energy. The Seller has a resource contingent obligation to Deliver the REC pursuant to the Confirmation. A remedy for non-

performance is available under Section R-9, except in the event and to the extent: (i) of Uncontrollable Force; (ii) the Renewable Energy Facility identified in the Confirmation was not on line to produce energy required for the REC due to Forced Outage, Scheduled Maintenance, or Fuel Impediment; or (iii) of the occurrence of such other circumstances to which the Parties may have agreed in the Confirmation, resulting in a reduction of output or unavailability to produce energy required for the REC. In the event and to the extent of an outage under (ii) or, if applicable, (iii), the resulting reduction in output for the applicable hour shall be allocated among all purchasers of RECs from the Renewable Energy Facility who are identified in the Confirmation (including purchasers identified under any provisions in the Confirmation allowing for subsequent identification) in accordance with any priorities or shares stated in the Confirmation, and if no priorities or shares are stated in the Confirmation, then proportionately in accordance with such purchasers' contract quantities under contracts with Seller.

**R-2.3.4 Resource Contingent Bundled REC.**

- (a) A "Resource Contingent Bundled REC" is a REC purchased and sold in a transaction that includes the purchase and sale of Energy. The Seller has a resource contingent obligation to Deliver the REC and Energy pursuant to the Confirmation. A remedy for non-performance is available under Section R-9, except in the event and to the extent: (i) of Uncontrollable

Force; (ii) the Renewable Energy Facility identified in the Confirmation was not on line to produce energy required for the REC or Delivery, due to Forced Outage, Scheduled Maintenance, or Fuel Impediment; or (iii) of the occurrence of such other circumstances to which the Parties agreed in the Confirmation, resulting in a reduction of output or unavailability to produce energy required for the REC or Delivery. In the event and to the extent of an outage under (ii) or, if applicable, (iii), the resulting reduction in output for the applicable hour shall be allocated among all purchasers of RECs and energy from the Renewable Energy Facility who are identified in the Confirmation (including purchasers identified under any provisions in the Confirmation allowing for subsequent identification) in accordance with any priorities or shares stated in the Confirmation, and if no priorities or shares are stated in the Confirmation, then proportionately in accordance with such purchasers' contract quantities under contracts with Seller.

- (b) The terms and conditions of Service Schedule B apply to the purchase and sale of Energy associated with a Resource Contingent Bundled REC as modified herein and as may be modified in the Confirmation, subject to the proviso stated in Section R-1.4.3. The hourly rate caps identified in Section B-3.6 of Service Schedule B shall apply, except (1) where the

Seller is a FERC regulated "public utility" as defined in Section 201(e) of the Federal Power Act, 16 U.S.C. § 824(e), and that Seller has been authorized to sell power like that provided for in Service Schedule B at market-based rates; or (2) where the Seller is not such a FERC regulated "public utility." When such hourly rate caps apply, (a) if the Contract Price is allocated between the REC and the Energy, the hourly rate caps shall apply to the Contract Price for the Energy and not the REC; and (b) if the Contract Price is not allocated between the REC and the Energy, the hourly rate caps shall apply to the bundled Contract Price. Service Schedule B Section B-3.8 is modified to state the following:

Energy schedules for the Purchaser's share of a Renewable Energy Facility may be modified by the Purchaser with not less than a thirty (30) minute notice before the hour in which the modification is to occur, unless otherwise agreed or unforeseen system operating conditions occur, or as otherwise required by, or pursuant to customary practice in, the applicable regional reliability council. A reduction in the energy schedule shall be made commensurately for the REC requirement for the applicable hour. Seller shall notify Purchaser of volumes to be delivered no later than thirty (30) minutes before the hour in which delivery is

to occur unless otherwise agreed or such notification is infeasible due to unforeseen system operating conditions. Seller shall timely notify the Purchaser of Scheduled Maintenance.

The following is added at the end of Section B-3.9:

(f) By the Seller when all or a portion of the unit is unavailable due to Fuel Impediment, unless otherwise agreed by the schedulers.

**R-2.3.5 Facility As-Run REC.** A "Facility As-Run REC" is a REC purchased and sold in a transaction that does not include the sale or purchase of Energy. The Seller is obligated to Deliver the REC pursuant to the Confirmation. A remedy for non-performance is available under Section R-9, except in the event and to the extent that, for any reason or no reason, the Renewable Energy Facility identified in the Confirmation was not on line to produce energy required for the REC. If the Renewable Energy Facility designated in the Confirmation is not operated, the resulting reduction in output for the applicable hour shall be allocated among all purchasers of RECs from the Renewable Energy Facility who are identified in the Confirmation (including purchasers identified under any provisions in the Confirmation allowing for subsequent identification) in accordance with any priorities or shares stated in the Confirmation, and if no priorities or shares are stated in the Confirmation, then proportionately in



accordance with such purchasers' contract quantities under contracts with Seller.

**R-2.3.6 Facility As-Run Bundled REC.**

- (a) A "Facility As-Run Bundled REC" is a REC purchased and sold in a transaction that includes the purchase and sale of Energy. The Seller has an obligation to Deliver the REC and Energy pursuant to the Confirmation. A remedy for non-performance is available under Section R-9, except in the event and to the extent that, for any reason or no reason, the Renewable Energy Facility identified in the Confirmation was not on line to produce energy required for the REC or Delivery. If the Renewable Energy Facility designated in the Confirmation is not operated, the resulting reduction in output for the applicable hour shall be allocated among all purchasers of RECs and energy from the Renewable Energy Facility who are identified in the Confirmation (including purchasers identified under any provisions in the Confirmation allowing for subsequent identification) in accordance with any priorities or shares stated in the Confirmation, and if no priorities or shares are stated in the Confirmation, then proportionately in accordance with such purchasers' contract quantities under contracts with Seller.
- (b) The terms and conditions of Service Schedule A apply to the purchase and sale of Energy associated with a Facility As-Run

Bundled REC as modified herein and as may be modified in the Confirmation, subject to the proviso stated in Section R-1.4.3. The hourly rate caps identified in Section A-3.7 of Service Schedule A shall apply, except (1) where the Seller is a FERC regulated "public utility" as defined in Section 201(e) of the Federal Power Act, 16 U.S.C. § 824(e), and that Seller has been authorized to sell power like that provided for in Service Schedule A at market-based rates; or (2) where the Seller is not such a FERC regulated "public utility." When such hourly rate caps apply, (a) if the Contract Price is allocated between the REC and the Energy, the hourly rate caps shall apply to the Contract Price for the Energy and not the REC; and (b) if the Contract Price is not allocated between the REC and the Energy, the hourly rate caps shall apply to the bundled Contract Price. Service Schedule A Section A-3.3 is modified to state the following:

Energy schedules may be modified by the Purchaser or Seller with not less than a thirty (30) minute notice before the hour in which the modification is to occur, unless otherwise agreed or unforeseen system operating conditions occur, or as otherwise required by, or pursuant to customary practice in, the applicable regional reliability council. A reduction in the energy schedule shall be made commensurately for the REC

requirement for the applicable hour. Seller shall notify Purchaser of volumes to be delivered no later than thirty (30) minutes before the hour in which delivery is to occur unless otherwise agreed or such notification is infeasible due to unforeseen system operating conditions.

**R-2.4 Environmental Attributes Contained In The REC.** The Confirmation may describe the Environmental Attributes covered by the REC as All Attributes, Program Attributes, or as the Parties otherwise may agree. If the Confirmation does not designate a REC Transaction as Program Attributes or otherwise limit the Environmental Attributes conveyed, and if a Renewable Energy Facility or Renewable Energy Source is specified, the REC Transaction shall be All Attributes. A designation of All Attributes will not be effective unless a Renewable Energy Facility or Renewable Energy Source is designated in the Confirmation.

**R-2.4.1 All Attributes.** An "All Attributes" REC conveys all of the Environmental Attributes the Renewable Energy Facility or Renewable Energy Source designated in the Confirmation is capable of producing, whether known or unknown on the Effective Date, including, at a minimum, all Environmental Attributes required by any Applicable Program designated in the Confirmation. Seller disclaims any warranty that Environmental Attributes other than those required by an Applicable Program designated in the Confirmation fulfill the requirements of any other Applicable Program. To establish the

Environmental Attributes conveyed, the Confirmation may include a specification thereof.

**R-2.4.2 Program Attributes.** A “Program Attributes” REC conveys the Environmental Attributes required by an Applicable Program designated in the Confirmation. It conveys no other Environmental Attributes, the rights to which are retained by the Seller. The Parties should verify that a designated Tracking System will recognize a Program Attributes REC. (Note, WREGIS does not recognize a Program Attributes limitation upon conveyed Environmental Attributes.)

### **R-3 Delivery and Title.**

**R-3.1 Unbundled REC Transactions.** This Section R-3.1 applies if the REC Product is a Firm REC, Resource Contingent REC, or Facility As-Run REC.

**R-3.1.1 Delivery.** “Deliver(y)(ed)” occurs upon completion of Seller’s transfer of the Contract Quantity to Purchaser. If a Tracking System is designated in the Confirmation, Seller shall cause transfer in accordance with the rules and procedures of the Tracking System. If the Tracking System does not state such rules or procedures, then Delivery shall occur upon the Tracking System’s transfer of the REC into Purchaser’s account. If a Tracking System is not designated in the Confirmation, Delivery is completed upon Seller’s delivery to Purchaser of an Attestation.

**R-3.1.2 Acceptance.** “Accept(ance)(ed)” means Purchaser’s receipt of Delivery of the REC from Seller, without Purchaser’s rejection. If a

Tracking System is designated in the Confirmation, Purchaser shall receive a transfer in accordance with the rules and procedures of the Tracking System, and Acceptance (or rejection) shall be made within five (5) Business Days following the date the Tracking System gives electronic notice to Purchaser that it has initiated transfer (this deadline applies regardless of any different period stated in the Tracking System's rules and procedures) and if timely rejection is not made, then the Delivery is Accepted. If a Tracking System is not designated in the Confirmation, Acceptance occurs upon Purchaser's Acceptance, without rejection within five (5) Business Days of delivery, of the Attestation delivered by Seller.

**R-3.1.3 Passage of Title.** Title to the REC shall pass from Seller to Purchaser upon Delivery and Acceptance.

**R-3.2 Bundled REC Transactions.** This Section R-3.2 applies if the REC Product is a Firm Bundled REC, Resource Contingent Bundled REC, or Facility As-Run Bundled REC.

**R-3.2.1 Delivery.** "Delivery(y)(ed)" occurs upon completion of Seller's transfer to Purchaser of the Contract Quantity of the REC and the Contract Quantity of the Energy. Delivery of the REC shall be completed in accordance with Section R-3.1.1. Delivery of Energy shall be completed in accordance with the terms and conditions of the Confirmation and the Agreement.

**R-3.2.2 Acceptance.** “Acceptance” of the REC occurs in the manner specified in Section R-3.1.2, and of the Energy upon receipt at the delivery point in accordance with the Confirmation.

**R-3.2.3 Passage of Title.** If the Vintage of the REC is prior to the Effective Date, title to the REC passes from Seller to Purchaser on the Effective Date or other date to which the Parties agree. If the REC is to be generated on or after the Effective Date, title to the REC passes upon the generation of each megawatt hour of energy required for production of the REC, and Seller shall hold the REC in trust for Purchaser until Delivery. Passage of title to Energy occurs pursuant to the Agreement.

**R-3.3 Actions Required of Parties to Assure Delivery.**

**R-3.3.1 Provision of Generation Information; Required Actions.** No less than monthly, Seller shall provide Purchaser with a written statement setting forth for applicable periods the quantities of Seller’s generation of energy for production of the REC. Seller shall promptly take all actions and do all things necessary and appropriate to cause the designated Tracking System, if any, to transfer the REC to Purchaser, including promptly providing all required information and documents in the required forms, and paying any and all fees the Tracking System imposes on Seller. If the Confirmation provides for a designated Tracking System to expedite issuance of certificates (for example, forward transfer certificates in WREGIS), Seller shall promptly take all actions required to cause such expedition. If no Tracking System is

designated in the Confirmation, then upon creation of the REC Seller shall promptly deliver the Attestation to Purchaser.

**R-3.3.2 Failure to Issue REC.** Seller is responsible for transfer and issuance of RECs by the Tracking System; Purchaser's sole responsibilities are maintenance of an account with the Tracking System and Acceptance of conforming RECs pursuant to Section R-3.1.2. Without prejudice to the immediately preceding sentence, in the event a Tracking System designated in the Confirmation declines to issue an electronic credit or physical certificate to document the attempted transfer, Delivery, or Acceptance of a REC, each Party will provide the other Party with all documents, communications, and information sent to or received from the Tracking System that pertain thereto. The Parties will cooperate, and each Party will complete any uncompleted items for which it is responsible, each at its own expense. If following such efforts, and due to no failure of Seller to take all required actions, the Tracking System does not issue the electronic credit or physical certificate to document the attempted transfer, Delivery, or Acceptance of the REC, Seller may, upon Purchaser's agreement (which Purchaser may decline in its discretion), provide an Attestation to Purchaser to effect Delivery. The obligations under this Section R-3.3.2 shall not be construed to diminish the Seller or the Purchaser's respective rights and obligations under the Agreement, Service Schedule R, and the Confirmation.

**R-3.4 Conveyance and Transfer.** As of both Delivery and passage of title, Seller shall transfer and convey to Purchaser all right, title, and interest in and to the REC and all Environmental Attributes underlying the REC pursuant to the Confirmation, and the exclusive right to any and all Reporting Rights Seller may have in or to the REC and the Environmental Attributes, free and clear of any liens, security interests, or other encumbrances.

**R-4 Charges; Credit.** The charge shall be an amount equal to the Contract Price multiplied by the Delivered and Accepted quantity, without prejudice to the right to recover damages owed in accordance with Section R-9. The Parties may state any credit terms and conditions to which they agree in the Confirmation; Section 27 of the Agreement applies unless otherwise agreed.

**R-5 Governing Law; Change in Law.**

**R-5.1 Governing Law.** Section 24 of the Agreement applies except as follows. If an Applicable Program is designated in the Confirmation, all performance obligations pursuant to the REC Transaction concerning the creation, issuance, transfer, tracking and retirement of the REC shall be governed as follows:

**R-5.1.1** If the Applicable Program was created by the laws of a Governmental Authority, then by the laws, rules, regulations, orders, and judicial precedent of such Governmental Authority;

**R-5.1.2** If the Applicable Program was not created by the laws of a Governmental Authority, but is a voluntary program, then Section 24 of the Agreement applies without modification, and the Parties shall be bound contractually to comply with the standards and criteria of the voluntary Applicable Program.



## **R-5.2 Change in Law.**

**R-5.2.1 Applicability.** Section R-5.2 applies only to REC Transactions for which an Applicable Program is designated in the Confirmation. In a REC Transaction for which no Applicable Program is designated, Seller makes no representation or warranty concerning compliance with any particular Applicable Program and any such representation or warranty is expressly disclaimed.

### **R-5.2.2 Definitions.**

- (a) “Change in Law” means any addition or amendment, by a Governmental Authority, to any laws, rules, regulations, orders, or judicial precedent, that applies to an Applicable Program designated in the Confirmation, that is enacted or issued after the Effective Date and nullifies compliance of the REC with the Applicable Program. An addition or amendment that is enacted or issued before the Effective Date but effective on or after the Effective Date is not a Change in Law.
- (b) “Regulatorily Continuing” means a REC Transaction in which the REC and Environmental Attributes conform to the requirements of an Applicable Program designated in the Confirmation as such requirements exist on the Effective Date and the Transfer Date, including requirements modified or added by a Change in Law.
- (c) “Not Regulatorily Continuing” means a REC Transaction in which the REC and Environmental Attributes conform to the

requirements of an Applicable Program designated in the Confirmation as such requirements exist on the Effective Date only, and the REC and Environmental Attributes are not required to conform to requirements modified or added by a Change in Law.

**R-5.2.3 Default Designation as Regulatorily Continuing.** A REC Transaction as to which an Applicable Program is designated in the Confirmation shall be Regulatorily Continuing unless the Parties specify in the Confirmation that the REC Transaction is Not Regulatorily Continuing.

**R-5.2.4 Effect of Change In Law in Regulatorily Continuing REC Transaction.**

- (a) If a Change in Law occurs in a Regulatorily Continuing REC Transaction, Seller shall be obligated to make reasonable efforts to attain compliance with the designated Applicable Program, the costs of which shall not be required to exceed any cost cap specified in the Confirmation. If despite such efforts to attain compliance, including reasonable expenditures, Seller cannot obtain compliance and Purchaser refuses to accept Delivery of the REC due to the Change in Law, Seller shall not be liable for damages under Section R-9.
- (b) In the event Purchaser refuses to accept Delivery of the REC under Section 5.2.4(a), and Seller has Delivered energy to Purchaser in the REC Transaction, Purchaser shall not be

relieved of its obligation to pay for such energy, which payment shall be either at the price allocated to energy in the Confirmation, if any, and if no allocation is made, then at an amount equal to the Replacement Price.

**R-5.2.5 Amendment to Address Change In Law.** Nothing in this Section R-5.2 shall be construed to preclude the Parties from agreeing to amend the Confirmation to permit a Seller to perform its obligations in a REC Transaction as to which a Change in Law has occurred.

**R-6 Seller Representations and Warranties.** In each REC Transaction, Seller represents and warrants to Purchaser the following:

**R-6.1** As of both Delivery and passage of title, Seller has and conveys to Purchaser all right, title, interest in and to the REC and all Environmental Attributes underlying the REC as required by the Confirmation, and the exclusive right to any and all Reporting Rights Seller may have in or to the REC and Environmental Attributes, free and clear of any liens, security interests, or other encumbrances.

**R-6.2** As of both Delivery and passage of title, the REC and Environmental Attributes conform to the requirements of the REC Transaction.

**R-6.3** If the REC Transaction is Regulatorily Continuing (and an Applicable Program is designated in the Confirmation), subject to any limits upon Seller's obligations under Section R-5.2.4, as of both Delivery and passage of title, that the REC and Environmental Attributes conform to the requirements of the designated Applicable Program as such requirements exist on the Effective Date and the Transfer Date.

**R-6.4** If the REC Transaction is Not Regulatorily Continuing (and an Applicable Program is designated in the Confirmation), as of both Delivery and passage of title, that the REC and Environmental Attributes conform to the requirements of the designated Applicable Program as such requirements exist on the Effective Date.

**R-6.5** With respect to deliveries of Energy in REC Transactions for Firm Bundled REC, Contingent Resource Bundled REC, and Facility As-Run Bundled REC, that Seller has complied with the representations and warranties stated in Section 33 of the Agreement.

**SELLER DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

**R-7 Records; Confidentiality**

**R-7.1 Correction of Records.** If any statement, charge or computation concerning a REC Transaction is inaccurate, the Parties promptly shall make any adjustments to records as reasonably necessary to correct such inaccuracy, and make any adjustment of payments required to correspond to the corrected records, provided, that Purchaser shall not be required to pay a higher Contract Price or accept a lower Contract Quantity than the Confirmation requires.

**R-7.2 Exception to Confidentiality.** Purchaser has the right to disclose to any Governmental Authority having jurisdiction over Purchaser, or to any voluntary Applicable Program and the person or entity specified by the rules of procedures of the voluntary Applicable Program to perform certification, any information necessary to demonstrate Purchaser's compliance with an Applicable Program

(whether or not designated in the Confirmation); provided, however, that Purchaser shall use reasonable efforts to minimize the scope of any such disclosure and shall require, as may be feasible, that the recipient maintain the confidentiality of any documents or confidential information governed by the provisions of Section 30.1 of the Agreement, including, if permitted under applicable procedures of the Governmental Authority or such administrator, and subject to any applicable public records laws, seeking a protective order or similar protective mechanism in connection with any disclosure. With respect to a REC, Purchaser also has the right to disclose the following to any customer or affiliate of Purchaser that is participating in any voluntary or mandatory Applicable Program: the Renewable Energy Source, the location of any Renewable Energy Facility designated in the Confirmation, and monthly generation quantities of energy underlying the REC.

**R-8 Uncontrollable Force.** The following is substituted for the first sentence of the second paragraph of Section 10 of the Agreement:

The following shall not be considered "Uncontrollable Forces": (i) Seller's cost of producing or obtaining the REC or energy (or ability to sell the REC or energy at a price exceeding the Contract Price); (ii) the loss or failure of Seller's supply, including materials or equipment; or (iii) Purchaser's inability economically to use or resell the REC or energy.

The following is added at the end of the second paragraph of Section 10 of the Agreement:

If production of energy at a Renewable Energy Facility designated in the Confirmation is curtailed due to an Uncontrollable Force, any production during

the period of such curtailment shall be allocated as follows: first, among all purchasers of Firm RECs, Firm Bundled RECs, Resource Contingent RECs, Resource Contingent Bundled RECs, and energy purchased under Service Schedules B and C, proportionately to such purchasers' contract quantities under contracts with Seller during such period and subject to any priorities or shares stated in the Confirmation, and second, to all purchasers of Facility As-Run RECs, Facility As-Run Bundled RECs and energy purchased under Service Schedule A, proportionately to such purchasers' contract quantities under contracts with Seller during such period and subject to any priorities or shares stated in the Confirmation.

**R-9 Remedies for Non-Performance.**

**R-9.1 Damages.** Section 21.3 of the Agreement, as modified in this Section 9, applies to REC Transactions.

**R-9.1.1 Failure to Receive or Deliver in Unbundled REC Transactions.**

This Section R-9.1.1 applies to REC Transactions for Firm REC, Resource Contingent REC, and Facility As-Run REC. Section 21.3(a)(3) and (5) of the Agreement are inapplicable. Section 21.3(a)(1) of the Agreement is modified as follows:

If Purchaser refuses to Accept Delivery of RECs Delivered by Seller in accordance with the Confirmation, then Purchaser shall be liable to Seller for the product of (i) and (ii) where (i) is the amount, if any, by which the Contract Price exceeded the Resale Price and (ii) is the amount by which the quantity of

RECs Purchaser refused to Accept was less than the Contract Quantity, subject to any limitations stated in the Confirmation.

21.3(a)(2) is modified as follows:

If Seller fails to Deliver RECs to Purchaser in accordance with the Confirmation, then Seller shall be liable to Purchaser for:

- (a) the product of (i) and (ii) where (i) is the amount, if any, by which the Replacement Price exceeded the Contract Price and
- (ii) is the amount by which the quantity of RECs Seller Delivered was less than the Contract Quantity; plus (b) if an Applicable Program is specified, the amount, if any, of penalties and alternative compliance payments a Governmental Authority required Purchaser to pay due to Seller's non-performance, and which penalties or alternative compliance payments are no longer subject to judicial review, subject to any limitations stated in the Confirmation.

**R-9.1.2 Failure to Receive or Deliver in Bundled REC Transactions.**

- (a) **Price Not Allocated between REC and Energy.** This Section R-9.1.2(a) applies to REC Transactions for Firm Bundled REC, Resource Contingent Bundled REC, and Facility As-Run Bundled REC, and in which the Confirmation does not allocate the Contract Price between the REC and Energy. Section 21.3(a)(1) of the Agreement is modified as follows:

If Purchaser refuses to Accept Delivery from Seller in accordance with the Confirmation, then Purchaser shall be

liable to Seller for: (a) the product of (i) and (ii) where (i) is the amount, if any, by which the Contract Price exceeded the Resale Price, and (ii) is the amount by which the quantity of RECs and Energy Purchaser refused to Accept was less than the Contract Quantity, plus (b) the amount of transmission charge(s), if any, for firm transmission service upstream of the delivery point, which Seller incurred to achieve the Resale Price, less the reduction, if any, in transmission charge(s) achieved as a result of the reduction in Purchaser's schedule or receipt of Energy (based on Seller's commercially reasonable efforts to achieve such reduction), subject to any limitations stated in the Confirmation. If the Purchaser refused to Accept Delivery of RECs but Accepted Delivery of Energy, then Purchaser shall pay Seller for such received Energy at the Resale Price of the Energy; if the Purchaser refused to Accept Delivery of Energy but Accepted Delivery of RECs, the Purchaser shall pay Seller for Accepted RECs at an amount equal to the Contract Price less the Resale Price of the Energy.

Section 21.3(a)(2) of the Agreement is modified as follows:

If Seller fails to Deliver to Purchaser in accordance with the Confirmation, then Seller shall be liable to the Purchaser for: (a) the product of (i) and (ii) where (i) is the amount, if



any, by which the Replacement Price exceeded the Contract Price, and (ii) is the amount by which the quantity of RECs and Energy Delivered was less than the Contract Quantity; plus (b) the amount of transmission charge(s), if any, for firm transmission service downstream of the delivery point, which Purchaser incurred to achieve the Replacement Price, less the reduction, if any, in transmission charge(s) achieved as a result of the reduction in Seller's schedule or delivery of Energy (based on Purchaser's commercially reasonable efforts to achieve such reduction), plus (c) if an Applicable Program is specified, the amount, if any, of penalties and alternative compliance payments a Governmental Authority required Purchaser to pay due to Seller's non-performance, and which penalties or alternative compliance payments are no longer subject to judicial review, subject to any limitations on such amounts stated in the Confirmation. In the event Seller Delivers Energy but not RECs, and regardless of Purchaser's receipt of Energy, Purchaser shall not be required to pay Seller for such Energy.

- (b) **Price Allocated between REC and Energy.** This Section R-9.1.2(b) applies to REC Transactions for Firm Bundled REC, Resource Contingent Bundled REC, and Facility As-Run

Bundled REC, in which the Confirmation sets forth an allocation of the Contract Price between the REC and energy:

- (i) If Purchaser refuses to Accept Delivery of RECs in accordance with the Confirmation, then Purchaser shall be liable to Seller as set forth in Section R-9.1.1.
- (ii) Subject to part (v) of this Section, if Seller fails to Deliver RECs in accordance with the Confirmation, then the Seller shall be liable to Purchaser as set forth in Section R-9.1.1.
- (iii) If Purchaser refuses to receive Delivery of Energy in accordance with the Confirmation, then Section 21.3(a) of the Agreement shall apply as set forth in the Agreement without modification by this Service Schedule R.
- (iv) If Seller fails to Deliver Energy in accordance with the Confirmation, then Section 21.3(a) of the Agreement shall apply as set forth in the Agreement without modification by this Service Schedule R.
- (v) In the event Seller Delivers Energy but fails to Deliver RECs, and regardless of Purchaser's receipt of Energy, Purchaser shall not be required to pay Seller for such Energy.

**R-10 Other Modifications of the Agreement for REC Transactions.**

**R-10.1 Revised Agreement Definitions.** For purposes of REC Transactions, the following revisions to definitions contained in Section 4 of the Agreement shall apply:

**R-10.1.1 Contract Quantity:** The amount of RECs and, if applicable, Energy, to be supplied for a transaction under the Agreement.

**R-10.1.2 Power Marketer:** An entity which buys, sells, and takes title to RECS, electric energy, transmission and/or other services from traditional utilities and other suppliers.

**R-10.1.3 Physically Settled Option:** Includes (i) a call option which is the right, but not the obligation, to buy an underlying REC and/or power product as defined under Service Schedule R according to the price and exercise terms set forth in the Confirmation; and (ii) a put option which is the right, but not the obligation, to sell an underlying REC or power product as defined under Service Schedule R according to the price and exercise terms set forth in the Confirmation.

**R-10.1.4 Replacement Price:** The price at which the Purchaser, acting in a commercially reasonable manner, effects a purchase of substitute REC(s), capacity and/or energy in place of the REC(s), capacity and/or energy not Delivered (for REC(s) and/or energy) or made available (for capacity only) by the Seller or, absent such a purchase, the market price for such quantity of REC(s), capacity and/or energy, as determined by the Purchaser in a commercially reasonable manner, for Energy at the delivery point specified in the Confirmation. Substitute

REC(s) must be similar in all material respects to the REC(s) specified in the Confirmation.

**R-10.1.5 Resale Price:** The price at which the Seller, acting in a commercially reasonable manner, effects a resale of the REC(s), capacity and/or energy not received by the Purchaser or, absent such a resale, the market price for such quantity of REC(s), capacity and/or energy, as determined by the Seller in a commercially reasonable manner, for Energy at the delivery point specified for the transaction in a Confirmation.

**R-10.2 Notices.** Section 12.2 of the Agreement is revised by inserting “RECs or” before the phrase “capacity and/or energy.”

**SERVICE SCHEDULE R  
ANNEX 1 - DEFINITIONS**

“Acceptance” has the meaning given in Sections R-3.1.2 or R-3.2.2, as applicable.

“All Attributes” has the meaning given in Section R-2.4.1.

“Applicable Program” means (a) a program adopted by a Governmental Authority that requires the sale, purchase, or use of energy generated or produced by a facility that converts renewable natural resources such as wind, sunlight, rain, tides, geothermal heat, hydro, or biomass into electric energy, including any Renewable Portfolio Standard (RPS) adopted by a Governmental Authority and all Governing Law that pertains thereto, or (b) a voluntary program for reporting, crediting or attributing RECs and all rules, standards and procedures adopted by the administering organization that pertain thereto.

“Attestation” means (a) the Seller’s written statement, certified as true and correct by an authorized officer of Seller, that the REC is Delivered and title to the REC has been transferred to the Purchaser, and that the Seller has taken all steps to effect transfer of the REC required by any Tracking System designated in the Confirmation, and (b) that satisfies the requirements of any Applicable Program designated in the Confirmation or is a generation information system record of ownership transfer. Annex 2 Exhibit 1 is a template for use of the Parties; an agreed form of Attestation should be included as a part of the Confirmation, and the agreed form will suffice as an Attestation regardless of whether or not it meets the criteria of this definition.

“Change in Law” has the meaning given in Section R-5.2.2(a).

“Deliver” has the meaning given in Sections R-3.1.1 or 3.2.1, as applicable.

“Effective Date” means the date both Parties have executed the Confirmation, or which the Parties otherwise specify in the Confirmation.

“Environmental Attribute” means the following, unless a Tracking System is designated in the Confirmation, and such Tracking System defines “Environmental Attribute,” in which case the Tracking System’s definition of “Environmental Attribute” shall control: a characteristic concerning or affecting the environment created by or resulting from the generation of electric energy by a Renewable Energy Source, and which capable of measurement, verification, or calculation. The term does not include tax credits or other tax benefits under any law or other direct third-party subsidies for generation of electric energy by a Renewable Energy Source. The term includes “non-energy attributes” under Oregon law and “non-power attributes” under Washington law. By way of example, the term may include the following: avoided emissions of CO<sub>2</sub> or other gases, or avoided water use (but not water or other rights or credits required under an Applicable Program to site and develop the Renewable Energy Facility itself).

“Facility As-Run REC” has the meaning given in Section R-2.3.5.

“Facility As-Run Bundled REC” has the meaning given in Section R-2.3.6(a).

“Firm Bundled REC” has the meaning given in Section R-2.3.2.

“Energy” in the case of a Firm Bundled REC refers to Firm Capacity/Energy Sale or Exchange Service under Service Schedule C as may be modified by Service Schedule R, in the case of a Resource Contingent Bundled REC refers to Unit Commitment Service under Service Schedule B as may be modified by Service Schedule R, and in the case of Facility As-Run Bundled REC refers to Economy Energy Service under Service Schedule A as may be modified by Service Schedule R.

“Firm REC” has the meaning given in Section R-2.3.1.

“Fuel Impediment” means the reduction or lack of wind or sunlight, excessive wind, or other insufficiency or excess of a Renewable Energy Source (excluding biomass), that causes a reduction or cessation of generation of electric energy by a Renewable Energy Facility.

“Forced Outage” means the removal from service availability of a generating unit, transmission line, or other facility for emergency reasons, or the condition in which the equipment is unavailable due to unanticipated failure (such unanticipated failure does not include a Fuel Impediment).

“Governing Law” has the meaning given in Section 24 of the Agreement as that Section may be modified by Section R-5.1.

“Governmental Authority” means the United States, a State thereof, any political subdivision or governmental body thereof, including any department or agency, with jurisdiction over a Party or an Applicable Program.

“Not Regulatorily Continuing” has the meaning given in Section R-5.2.2(b).

“Program Attributes” has the meaning given in Section R-2.4.2.

“Regulatorily Continuing” has the meaning given in Section R-5.2.2(a).

“REC” refers to a renewable energy certificate and means a credit or certificate representing Environmental Attributes created by or resulting from the generation of one (1) megawatt hour of electric energy by a Renewable Energy Source, subject to the terms and conditions stated in the Confirmation

“REC Product” has the meaning given in Section R-2.2.

“REC Transaction” has the meaning given in Section R-2.1.

“Resource Contingent REC” has the meaning given in Section R-2.3.3.

“Resource Contingent Bundled REC” has the meaning given in Section R-2.3.4(a).

“Renewable Energy Facility” means an electric generation unit or other facility or installation capable of producing or emitting electric energy using a Renewable Energy Source.

“Renewable Energy Source” means (a) a resource that is recognized as a renewable energy source under an Applicable Program designated in the Confirmation, or (b) if no Applicable Program is designated in the Confirmation, a natural resource from or through which electric energy can be generated, including wind, solar, geothermal, landfill gas, wave, tidal, thermal ocean technologies, and hydroelectric power, and excluding fossil carbon-based, non-renewable, or radioactive fuel.

“Reporting Rights” means the right to report and register the exclusive ownership of the REC or Environmental Attributes under Governing Law or any other laws, regulations, orders or judicial precedents of the government of the United States of America or any department or agency thereof, or any State or political subdivision thereof, including mandatory and voluntary reporting, and including reporting under section 1605(b) of the Energy Policy Act of 1992 and any foreign or international emissions trading or reporting program.

“Scheduled Maintenance” means an outage or partial outage scheduled to perform the necessary normal maintenance on a generating unit, transmission line, or other facility to preserve the reliability of the unit or overall system reliability, including scheduled outages for such maintenance.

“Tracking System” means the entity, if any, the Parties designated in the Confirmation that will perform REC tracking and accounting functions, including receiving evidence of generation of the REC and crediting the resulting REC to the Purchaser’s account.

“Transfer Date” means the date specified in the Confirmation, no later than which Seller must make Delivery as defined in Sections R-3.1.1 or R-3.2.1, as applicable.

“Vintage” means the period in which the REC was or will be created.

**SERVICE SCHEDULE R ANNEX 2**

**FORM OF  
REC TRANSACTION CONFIRMATION**

**IDENTIFICATION OF PARTIES**

Name of Seller:

\_\_\_\_\_

Name of Purchaser:

\_\_\_\_\_

Seller Information:

\_\_\_\_\_

Purchaser Information:

\_\_\_\_\_

Contact

Contact

Tel (O): \_\_\_\_\_

Tel (O): \_\_\_\_\_

Tel (Cell): \_\_\_\_\_

Tel (Cell): \_\_\_\_\_

E-mail: \_\_\_\_\_

E-mail: \_\_\_\_\_

Fax: \_\_\_\_\_

Fax: \_\_\_\_\_

Contact information is subject to change by notice.

**ADDRESSES FOR FORMAL NOTICES:**

Purchaser:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Seller

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**INCORPORATED DOCUMENTATION** (any "long form" or other bilateral agreements between the Parties applicable to this Confirmation and incorporated herein)

\_\_\_\_\_

**REC TRANSACTION TERMS**

REC Product (e.g., Firm REC, Firm Bundled REC, etc.) (see Section R-2.3):

\_\_\_\_\_



Vintage of REC already created or period of generation for REC to be created (mm/yyyy)

---

Contract Quantity (stated either on a megawatt hour basis or percentage of output of a designated Renewable Energy Facility)

---

Transfer Date (generally the Effective Date of this Confirmation for REC that already exists, and future date for REC to be generated after Effective Date)

---

Contract Price:

---

Allocation, if agreed:

REC:

---

Energy:

---

Environmental Attributes (Check One)

All Attributes (this designation is effective only if a Renewable Energy Source or Renewable Energy Facility is designated below)

Program Attributes (this designation is effective only if an Applicable Program is identified below) (Note: WREGIS and possibly other Tracking Systems will not recognize a Program Attributes REC, or may treat it as an All Attributes REC)

Applicable Program (required for Program Attributes; not required for All Attributes, but designation establishes the minimum Environmental Attributes required by a designated Applicable Program). Also required for recovery of penalties and alternative compliance payments (Section R-9.1). Designation should include detailed information, including any applicable legal citations, to assure adequate description of the program.

---

Designation of Renewable Energy Source or Renewable Energy Facility (required for All Attributes).

Renewable Energy Source: \_\_\_\_\_

Renewable Energy Facility

Name: \_\_\_\_\_

Location: \_\_\_\_\_

Generation Information System number: \_\_\_\_\_

Tracking System number: \_\_\_\_\_

Fuel (wind, solar, etc.): \_\_\_\_\_

Change in Law Provisions (Check One)

Regulatorily Continuing (Section R-5.2.2(b), requiring that Seller make commercial reasonable efforts to obtain compliance with Changes in Law in the designated Applicable Program. If checked, state any agreed maximum costs of such efforts (if no maximum is stated, then no maximum applies):

\$ \_\_\_\_\_

Not Regulatorily Continuing (Section R-5.2.2(c)).

Tracking System(s) if any: (if none specified, then Delivery occurs by Attestation and not by Tracking System crediting)

Damages. Damages include reimbursement for penalties and alternative compliance payments, subject to any agreed cap on this damages component, which can be zero (Section R-9.1):

\$ \_\_\_\_\_

Any agreements concerning forward certificates in WREGIS or other Tracking System Expedition ) (Section R-3.3.1):

\_\_\_\_\_

**TERMS APPLICABLE TO ENERGY IF INCLUDED IN REC PRODUCT**

Period (Schedule) of Delivery: From \_\_ \ \ \ To \_\_ \ \ \

Schedule (Days and Hours): \_\_\_\_\_

Delivery Rate: \_\_\_\_\_

Delivery Point(s): \_\_\_\_\_

Contract Quantity (specify all details): \_\_\_\_\_

Transmission Path for the Transaction (If Applicable): \_\_\_\_\_

**EFFECTIVE DATE AND OTHER PROVISIONS**

Effective Date (no earlier than mutual execution of this Confirmation)

\_\_\_\_\_

Other provisions: \_\_\_\_\_ [generally stated in attachment to the Confirmation]

The Parties agree to the REC Transaction set forth herein as of the Effective Date

Seller

Purchaser

Signed: \_\_\_\_\_

Signed: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_ Date: \_\_\_\_\_

**ANNEX 2, Exhibit 1  
Form of Attestation To Be Included As Exhibit To Confirmation**

**Attestation Of [Seller] ("REC Generator")  
Of Sale, Transfer, and Delivery Of Renewable Energy Certificate to  
[Purchaser] "Purchaser"**

**Party and Contact Information:**

[Insert names and addresses of Parties, address, and contact information]

**Attestation:**

I, [name of attesting officer], the [title] of Seller, declare and certify that Seller sold and delivered

Elect one:

Environmental Attributes Only

Bundled with electricity

to Purchaser, and further, that

1. Was generated by the Renewable Energy Facility ("REF") designated below and sold, transferred and delivered, subject to receipt of payment, to Purchaser.
2. Is associated with electricity delivered into the [insert delivery area] in compliance with applicable energy delivery rules.

REF Generator Name and Number	Technology Type	Fuel Type (Renewable Energy Source)	Generation Period (mm/yy)	Generator First Day of Operation

The above statements are true and correct to the best of my knowledge, and based on my duly diligent inquiry. This Attestation may serve as a Bill of Sale to document, in accordance with the Confirmation, the transfer from Generator to Purchaser of all of Seller's right, title and interest in and to the REC and environmental attributes it represents, as set forth above.

Either Party may disclose this Attestation to others, including a Tracking System, public utility commissions and other regulatory bodies having jurisdiction over Purchaser, and administrators of voluntary green energy programs, to substantiate and verify the accuracy of the Parties' compliance, advertising and public claims.

Signature:

\_\_\_\_\_

Date \_\_\_\_\_

Print Name: \_\_\_\_\_

**SCHEDULE Q**  
**FERC ACCEPTED SELLER-SPECIFIC COST-BASED RATE SCHEDULES**

Note: Each rate schedule included in this Schedule Q is applicable solely to the Member which submitted that rate schedule to FERC, and not to any other Member.

**INDEX**

<b>Name of Member</b>	<b>FERC Order Re Underlying Rate Schedule</b>
Arizona Public Service Company	Letter Order, Docket No. ER16-1877-000 (July 15, 2016)
Nevada Power Company	Letter Order, Docket No. ER11-1832-000 (Nov. 23, 2010)
PacifiCorp	Letter Order, Docket No. ER16-1964-000 (Aug. 16, 2016)
Public Service Company of Colorado	Letter Order, Docket No. ER15-678-000 (Feb. 4, 2015)
Sierra Pacific Power Company	Letter Order, Docket No. ER14-1420-000 (Apr. 15, 2014)
Southwestern Public Service Company	Letter Order, Docket No. ER08-857-001 (Aug. 28, 2008)
Westar Energy, Inc.	Letter Order, Docket No. ER11-3233-000 (May 26, 2011)

## WSPP AGREEMENT SCHEDULE Q FOR ARIZONA PUBLIC SERVICE COMPANY

### Determination of Ceiling Rates Applicable to Sales Made by Arizona Public Service Company Under the WSPP Agreement

#### I. DEFINITIONS

The following terms shall have the specified meaning when used in any Transaction between Arizona Public Service Company ("APS") and any Customer pursuant to this Cost-Based Tariff ("Tariff"):

1. **APS**: Arizona Public Service Company or any successor-in-interest to Arizona Public Service Company.
2. **Commission**: The Federal Energy Regulatory Commission, or any successor federal agency having jurisdiction over this tariff.
3. **Customer**: Any entity entering into a Transaction with APS under this Tariff.
4. **System Incremental Cost**: ("SIC") System Incremental Cost means, with respect to a Transaction, all reasonably forecasted incremental generation, power purchase, and other, related costs that APS would not otherwise incur if such Transaction is not entered into. System Incremental Cost shall include, but not be limited to, costs associated with fuel, labor, variable operation and maintenance, start-up, shut-down, fuel handling, regulatory commission charges, emission allowance and other environmental compliance costs, transmission losses, wheeling charges, any applicable taxes or assessments based on the revenues received or quantities sold under the Transaction, and with respect to capacity and energy purchased from a third party, the total forecasted amount that would be paid for that capacity and energy by APS. For purchases of energy and capacity by APS, System Incremental Cost will also include, but not be limited to, regulatory commission charges, emission allowances, transmission losses, wheeling charges and taxes.
5. **Tariff**: This Cost-Based Tariff, as it may be amended and/or superseded from time to time.
6. **Transaction**: An individual transaction scheduled pursuant to this Tariff.
7. **Party**: References to a Party shall mean either APS or the Customer, who collectively shall be referred to as "Parties."

#### II. AVAILABILITY

Service under this Tariff shall be available to Customers for Transactions that have a duration as agreed to by the Parties under the Service Agreement.

### III. SALES OF ELECTRIC CAPACITY AND/OR ENERGY

APS and Customers may enter into Transactions under this Tariff from time-to-time. All such Transactions shall be voluntary on the part of APS and the Customer(s). APS at its sole discretion will determine the amounts of and times that electric capacity and/or energy is to be made available under this Tariff prior to entering into a Transaction.

### IV. RATES

1. A Transaction will be priced at rates established by agreement between Seller and Buyer, provided that the sum of all charges with respect to each Transaction may be up to but shall not exceed the sum of:
  - a) A demand charge, equal to, as appropriate:
    - i. \$9,233 /MW/month;
    - ii. \$2,131 /MW/week;
    - iii. \$426 /MW/day, provided the total demand charge in any week, pursuant to a sale of daily electric power, shall not exceed the weekly rate times the highest amount in megawatts of purchased electric power in any day during such week; or
    - iv. \$26.63 /MW/hour, provided that the total demand charge in any day, pursuant to a sale of hourly electric power, shall not exceed the daily rate times the highest amount in megawatts of purchased electric power in any hour during such day, and the total demand charges in any week, pursuant to a sale of hourly or daily electric power, shall not exceed the weekly rate times the highest amount in megawatts of purchased electric power in any such week; and
  - b) The System Incremental Cost, forecasted at the time the Transaction is executed, plus 10% of the forecasted System Incremental Cost; and
  - c) The cost of transmission service and any ancillary services purchased by APS and resold to Customer, as known or forecasted at the time the Transaction is executed.

### V. EXPANSION OF FACILITIES

APS will have no obligation under this Tariff to plan its system or modify its facilities in order to provide service hereunder.

### VI. OTHER TERMS AND CONDITIONS

Except to the extent otherwise specifically agreed to by the Parties, all Transactions under APS's Schedule Q shall be governed by the terms and conditions set forth in the WSPP Agreement.

**COST-BASED RATE SCHEDULE  
FOR  
PACIFICORP**

Determination of Ceiling Rates Applicable to Cost-Based Sales Made by  
PacifiCorp

1. The following rates shall be applicable to any cost-based sale of power and/or energy made by PacifiCorp (1) pursuant to the applicable terms and conditions of the WSPP Agreement, including under Service Schedule A (Economy Energy Service), Service Schedule B (Unit Commitment Service), and Service Schedule C (Firm Capacity/Energy Sale or Exchange Service), and (2) for a term of less than one year.
2. The rates for any cost-based power and/or energy sale made by PacifiCorp pursuant to the applicable terms and conditions of the WSPP Agreement from PacifiCorp's generating resources shall not exceed the following:
  - (i) Maximum Demand Charge:  
The Maximum Demand Charge shall be capped using the following methodology:

<u>Units Most Likely To Participate Methodology</u>	
Monthly	Up to \$11,317/MW
Weekly	Up to \$2,612/MW
Daily	Up to \$522/MW, provided, however, that the Daily rate of \$522/MW shall not exceed the product of the number of kilowatts sold for a week multiplied by the maximum weekly demand charge of \$2,612/MW.
Hourly	Up to \$32.64/MW, provided, however, that the hourly rate of \$32.64/MW shall not exceed the product of the number of kilowatts sold for a day multiplied by the maximum daily demand charge of \$522/MW, and also not exceed the product of the number of kilowatts sold for a week multiplied by the maximum weekly demand charge of \$2,612/MW.
  - (ii) Energy Charge of 100% of SIC, plus up to 10% of SIC; and
  - (iii) All charges incurred for transmission service, ancillary services, and transmission losses.
3. If PacifiCorp enters into a purchased power transaction specifically for the purpose of reselling such power hereunder, the rates shall not exceed the sum of the following:



- (i) PacifiCorp's out-of-pocket costs of purchasing such capacity and/or energy, including all related charges incurred for transmission service, ancillary services, transmission losses and any applicable taxes or other similar governmental impositions; and
  - (ii) \$1.00 per megawatt-hour multiplied by the total megawatt-hours scheduled.
- 4. System Incremental Costs ("SIC") means all reasonably forecasted costs of such power and/or energy and which otherwise would not have been incurred by PacifiCorp including, but not limited to, costs associated with fuel, labor, variable operation and maintenance, start-up, shut-down, fuel handling, taxes or other similar governmental impositions, regulatory commission charges, emission allowances and other environmental compliance costs.
- 5. Purchasers in cost-based transactions shall also be responsible for any taxes, purchased power costs, and for any other costs incurred by PacifiCorp in fulfilling its obligations for the provision of power and/or energy under the WSPP Agreement, which cost would otherwise not have been incurred, had such service not been provided.

## WSPP AGREEMENT SCHEDULE Q FOR NEVADA POWER COMPANY

### Determination of Ceiling Rates Applicable to Cost-Based Sales Made by Nevada Power Company

1. The following rates shall be applicable to any cost-based sale of power and/or energy made by Nevada Power Company, d/b/a NV Energy ("Nevada Power") (1) pursuant to the applicable terms and conditions of the WSPP Agreement, including under Service Schedule A (Economy Energy Service), Service Schedule B (Unit Commitment Service), and Service Schedule C (Firm Capacity/Energy Sale or Exchange Service), (2) at a delivery point located within the Nevada Power balancing authority area, and (3) for a term of less than one year.
2. The rates for any cost-based power and/or energy sale made by Nevada Power pursuant to the applicable terms and conditions of the WSPP Agreement from Nevada Power's generating resources shall not exceed the following:

(i) Maximum Demand Charge:

The Maximum Demand Charge shall be capped using the following methodology:

Units Most Likely To Participate Methodology

Monthly	Up to \$8,390/MW
Weekly	Up to \$1,940/MW
Daily	Up to \$390/MW, provided, however, that the Daily rate of \$390/MW shall not exceed the product of the number of kilowatts sold for a week multiplied by the maximum weekly demand charge of \$1,940/MW.
Hourly	Up to \$24.40/MW, provided, however, that the hourly rate of \$24.40/MW shall not exceed the product of the number of kilowatts sold for a day multiplied by the maximum daily demand charge of \$390/MW, and also not exceed the product of the number of kilowatts sold for a week multiplied by the maximum weekly demand charge of \$1,940/MW.

- (ii) Energy Charge of 100% of SIC, plus up to 10% of SIC; and
  - (iii) All charges incurred for transmission service, ancillary services, and transmission losses.
3. If Nevada Power enters into a purchased power transaction specifically for the purpose of reselling such power hereunder, the rates shall not exceed the sum of the following:
    - (i) Nevada Power's out-of-pocket costs of purchasing such capacity and/or energy, including all related charges incurred for transmission service, ancillary services, transmission losses and any applicable taxes or other similar governmental impositions; and
    - (ii) \$1.00 per megawatt-hour multiplied by the total megawatt-hours scheduled.

4. System Incremental Costs ("SIC") means all reasonably forecasted costs of such power and/or energy and which otherwise would not have been incurred by Nevada Power including, but not limited to, costs associated with fuel, labor, variable operation and maintenance, start-up, shut-down, fuel handling, taxes or other similar governmental impositions, regulatory commission charges, emission allowances and other environmental compliance costs.
5. Purchasers in cost-based transactions shall also be responsible for any taxes, purchased power costs, and for any other costs incurred by Nevada Power Company in fulfilling its obligations for the provision of power and/or energy under the WSPF Agreement, which cost would otherwise not have been incurred, had such service not been provided.

**WSPP AGREEMENT SCHEDULE Q FOR PUBLIC SERVICE COMPANY OF  
COLORADO**

**Determination of Ceiling Rates Applicable to Sales Made by Public Service Company of  
Colorado under the WSPP Agreement**

1. The following rates shall be applicable to any cost-based sale of power and/or energy made by Public Service Company of Colorado ("Public Service") (1) pursuant to the WSPP Agreement, including under Service Schedule A (Economy Energy Service), Service Schedule B (Unit Commitment Service), and Service Schedule C (Firm Capacity/Energy Sale or Exchange Service) and (2) at a delivery point located within the Public Service balancing authority area.
2. The rates for any cost-based power and/or energy sale made pursuant to the WSPP Agreement from certain Public Service generation resources shall not exceed the following:

Maximum Demand Charge:

The Maximum Demand Charge shall be capped at either of the following methodologies:

Units Most Likely to Participate Methodology

Annual	\$123.73/kW
Monthly	\$10.62/kW
Weekly	\$2.45/kW
Daily	\$0.49/kW, provided, however, that the Daily rate of \$0.49/kW shall not exceed the product of the number of kilowatts sold for a week multiplied by the maximum weekly demand charge of \$2.45/kW.
Hourly	\$0.0306/kW, provided, however, that the hourly rate of \$0.0306/kW shall not exceed the product of the number of kilowatts sold for a day multiplied by the maximum daily demand charge of \$0.49/kW, and also not exceed the product of the number of kilowatts sold for a week multiplied by the maximum weekly demand charge of \$2.45/kW.

Unit Revenue Constraint Methodology

Annual	\$265.72/kW
Monthly	\$22.14/kW
Weekly	\$5.11/kW
Daily	\$1.02/kW, provided, however, that the Daily rate of \$1.02/kW shall not exceed the product of the number of kilowatts sold for a week multiplied by the maximum weekly demand charge of \$5.11/kW.

Hourly \$0.0639/kW, provided, however, that the hourly rate of \$0.0639/kW shall not exceed the product of the number of kilowatts sold for a day multiplied by the maximum daily demand charge of 1.02/kW, and also not exceed the product of the number of kilowatts sold for a week multiplied by the maximum weekly demand charge of \$5.11/kW.

Note: The total amount of Power available for cost-based sales by Public Service based on the costs of Comanche 3 under the WSPP Agreement and under other Public Service tariffs and arrangements, for which the agreed upon demand charge is determined based on Comanche 3, is limited to 500 MWs on an hourly basis.

Plus:

Energy Charge:

- (a) no less than 100% of Public Service's System Incremental Costs (SIC); plus
- (b) up to 10% of SIC, provided, however, that whenever the SIC for an hour is based on purchased power, the 10% mark up shall be limited to one mill/kWh.

Note: The total charges for any sale by Public Service using the Maximum Demand Charge as determined based on the Unit Revenue Constraint Methodology shall not exceed (1) the product of the requested demand (kW) multiplied by the applicable Maximum Demand Charge using the Unit Revenue Constraint Methodology as specified above, plus the variable costs of Comanche 3 (based on the most recent historical month where Comanche 3 was operational at least 80 percent of the time), and (2) be lower than a floor equal to 100% of Public Service's System Incremental Cost.

3. When a cost-based sale of power and/or energy made by Public Service under the WSPP Agreement is conditioned upon Public Service acquiring purchased power, Purchaser shall pay the following amounts to Public Service for power and energy:
  - (a) Public Service's actual purchased power costs; plus
  - (b) a one mill adder for transactions of less than one year in duration.
4. Purchasers in cost-based transactions shall also be responsible for any taxes, purchased power costs, and for any other costs incurred by Public Service in fulfilling its obligations for the provision of power and/or energy under the WSPP Agreement, which otherwise would not have been incurred, had such service not been provided.
5. For purposes of this Schedule Q, "Purchased Power" means the Power and Energy

purchased from a third party by Public Service and shall consist of the total amount paid therefor by Public Service associated with such purchase, plus any cost which otherwise would not have been incurred, including, but not limited to, regulatory commission charges, transmission losses, third-party transmission charges, and taxes, fees or assessments related to such transactions. Tax expenses shall include the expenses that are incurred as taxes either in connection with the sale or production of such Power and Energy. The term Purchased Power shall not apply to long-term purchases that are secured to supply Public Service's obligation load requirements as a system resource or to meet other regulatory requirements.

6. For purposes of this Schedule Q, System Incremental Costs ("SIC")<sup>1</sup> shall be determined as follows:

SIC are any costs forecasted to be incurred by Public Service solely by reason of its provision of an incremental amount of coordination-type energy to supply to another company, including but not limited to, costs for fuel, reactant, labor, operation, maintenance, start-up, fuel handling, taxes, emission allowances, and services provided by RTOs, ISOs, or other transmission providers such as transmission and ancillary services and losses. Such costs may also include costs paid to third parties where Public Service has an existing contractual entitlement to purchase energy.

- For intraday (real-time) transactions, incremental cost is determined through a review of hourly system characteristics.
- For non-intraday transactions, incremental cost is determined by using a resource optimization model such as, but not limited to ProSym or GenTrader.

The forecasted incremental cost represents the relative increase in total variable cost, in comparison to the previously determined base variable cost. Public Service forecasts incremental costs on a monthly, daily and hourly basis in order to evaluate whether it would be economic to engage in a wholesale sale of coordination energy.<sup>2</sup> In order for Public Service to transact, and sell power to another entity, the purchaser must be willing to pay no less than the forecasted incremental cost for the period during which the energy is sold. It is necessary to use forecasted costs because transactions are entered into in the market in advance. The forecast incremental costs for Public Service utilize its unique portfolio resources, applicable fuel costs and generation characteristics.

Monthly forecasted incremental variable costs are developed utilizing an optimization and unit commitment model. Generation characteristics such as forecasted fuel prices, effective heat rates, system penalty factors, start-up costs, unit parameters (e.g., minimum run time, dispatch minimum, dispatch maximum), variable O&M, and tolling costs are utilized in the model to establish the base cost to serve a forecasted amount of obligation (load and the net of applicable firm purchase and sales transactions). Planned and forced outages are also considered in the model. Additional obligations are added to the model (consistent with blocks traded in the market), and the optimized costs are

returned. The difference in costs between the first and second run, *i.e.*, with and without an incremental transaction or load addition, will represent the incremental cost to serve the additional obligation. The forecasted incremental cost to serve the additional obligation will establish the minimum price required in order to engage in a sale of similar energy volume.

Daily forecasted incremental costs are developed utilizing a unit commitment and optimization program. The best available generation characteristics are utilized in the model to forecast the base cost to serve the next-day obligation. Additional obligations are applied and system costs evaluated to establish the forecasted cost to serve a potential incremental sale.

On an hourly basis, the system operator forecasts the incremental cost to serve an additional obligation by evaluating current and short-term forecast system conditions and the resources that are not previously allocated to meet established obligations. If additional portfolio resources are available (not allocated for native load requirements), the system operator will evaluate the comprehensive cost to produce the quantity of energy needed for an incremental sale.

If the Parties to a transaction under this WSPP Agreement expressly agree in a transaction agreement, incremental costs may be determined in the same manner as specified above, but on an after-the-fact, actual basis.

Note 1: The Commission previously accepted this incremental rate methodology in *Xcel Energy Services, Inc.; et al.*, 117 FERC ¶ 61,180, at PP 45-49 (2006).

Note 2: The Commission has found this approach to be acceptable. *See, e.g., Western Systems Power Pool*, 55 FERC ¶ 61,495, at 62,718 (1991) (noting that incremental cost “may be forecasted hourly, weekly, or monthly”).

## WSPP AGREEMENT SCHEDULE Q FOR SIERRA PACIFIC POWER COMPANY

### Determination of Ceiling Rates Applicable to Cost-Based Sales Made by Sierra Pacific Power Company

1. The following rates shall be applicable to any cost-based sale of power and/or energy made by Sierra Pacific Power Company, d/b/a NV Energy ("Sierra") (1) pursuant to the applicable terms and conditions of the WSPP Agreement, including under Service Schedule A (Economy Energy Service), Service Schedule B (Unit Commitment Service), and Service Schedule C (Firm Capacity/Energy Sale or Exchange Service), (2) at a delivery point located within the Nevada Power Company balancing authority area ("NEVP"), and (3) for a term of less than one year.
2. The rates for any cost-based power and/or energy sale made by Sierra pursuant to the applicable terms and conditions of the WSPP Agreement from Sierra's generating resources shall not exceed the following:

(i) Maximum Demand Charge:

The Maximum Demand Charge shall be capped using the following methodology:

Units Most Likely To Participate Methodology

Monthly	Up to \$9,810/MW
Weekly	Up to \$2,260/MW
Daily	Up to \$450/MW, provided, however, that the Daily rate of \$450/MW shall not exceed the product of the number of kilowatts sold for a week multiplied by the maximum weekly demand charge of \$2,260/MW.
Hourly	Up to \$28.10/MW, provided, however, that the hourly rate of \$28.10/MW shall not exceed the product of the number of kilowatts sold for a day multiplied by the maximum daily demand charge of \$450/MW, and also not exceed the product of the number of kilowatts sold for a week multiplied by the maximum weekly demand charge of \$2,260/MW.

- (ii) Energy Charge of 100% of SIC, plus up to 10% of SIC; and
  - (iii) All charges incurred for transmission service, ancillary services, and transmission losses.
3. If Sierra enters into purchased power transaction specifically for the purpose of reselling such power hereunder, the rates shall not exceed the sum of the following:
    - (i) Sierra's out-of-pocket costs of purchasing such capacity and/or energy, including all related charges incurred for transmission service, ancillary services, transmission losses and any applicable taxes or other similar governmental



impositions; and

- (ii) \$1.00 per megawatt-hour multiplied by the total megawatt-hours scheduled.
4. System Incremental Costs ("SIC") means all reasonably forecasted costs of such power and/or energy and which otherwise would not have been incurred by Sierra including, but not limited to, costs associated with fuel, labor, variable operation and maintenance, start-up, shut-down, fuel handling, taxes or other similar governmental impositions, regulatory commission charges, emission allowances and other environmental compliance costs.
  5. Purchasers in cost-based transactions shall also be responsible for any taxes, purchased power costs, and for any other costs incurred by Nevada Power Company in fulfilling its obligations for the provision of power and/or energy under the WSPF Agreement, which cost would otherwise not have been incurred, had such service not been provided.

**WSPP AGREEMENT SCHEDULE Q FOR SOUTHWESTERN PUBLIC SERVICE  
COMPANY**

**Determination of Ceiling Rates Applicable to Sales Made by Southwestern Public Service  
Company under the WSPP Agreement**

1. The following rates shall be applicable to any cost-based sale of power and/or energy made by Southwestern Public Service Company ("SPS") (1) pursuant to the WSPP Agreement, including under Service Schedule A (Economy Energy Service), Service Schedule B (Unit Commitment Service), and Service Schedule C (Firm Capacity/Energy Sale or Exchange Service and (2) at a delivery point located within the SPS balancing authority area.
2. The rates for any cost-based power and/or energy sale made pursuant to the WSPP Agreement from SPS generation resources shall not exceed the following:

Maximum Demand Charge:

Monthly	\$ 7.56/kW
Weekly	\$ 1.745/kW
Daily (On-peak)	\$ 0.349/kW, provided, however, that the Total Weekly charges for a customer paying the Daily rate of \$0.349/kW (on-peak) or \$0.249 (off-peak) shall not exceed the product of the number of kilowatts sold for a week multiplied by the maximum Weekly demand charge of \$1.745/kW.
Daily (Off-peak)	\$ 0.249/kW
Hourly	\$ 21.813/MW, provided, however, that the Total Daily charges for a customer paying the Hourly rate of \$21.813/MW shall not exceed the product of the number of kilowatts sold for a day multiplied by the maximum Daily (on-peak) demand charge, and total Weekly charges for such a customer shall not exceed the product of the number of kilowatts sold for a week multiplied by the maximum Weekly demand charge of \$1.745/kW.

plus

Energy Charge:

- (a) no less than 100% of SPS's System Incremental Costs (SIC); plus
- (b) up to 10% of SIC, provided, however, that whenever the SIC for an hour is based on purchased power, the 10% mark up shall be limited to one mill/kWh.

Note A: The total charges for any cost-based sale under the WSPP Agreement shall not exceed the product of the requested demand (kW) multiplied by the applicable Maximum Demand Charge in this Section 1, plus the variable costs of Lea Power

Partners (based on the second previous month's cost data), and notwithstanding the foregoing, a floor equal to 100% of SPS's System Incremental Cost.

Note B: The total amount of Power available for cost-based sales by SPS under the WSPP Agreement and under other SPS tariffs and agreements for which the agreed upon demand charge is determined based on Lea Power Partners is limited to 600 MWs on an hourly basis.

3. When a cost-based sale of power and/or energy made by SPS under the WSPP Agreement is conditioned upon SPS acquiring Purchased Power, Purchaser shall pay the following amounts to SPS for power and energy:
  - (a) SPS's actual Purchased Power costs; plus
  - (b) a one mill adder for transactions of less than one year in duration.
4. Purchasers in cost-based transactions shall also be responsible for any taxes, purchased power costs, and for any other costs incurred by SPS in fulfilling its obligations for the provision of power and/or energy under the WSPP Agreement, which otherwise would not have been incurred, had such service not been provided.
5. For purposes of the WSPP Agreement, System Incremental Costs ("SIC") shall be determined as follows:

SIC are any costs forecasted to be incurred by SPS solely by reason of its provision of an incremental amount of coordination-type energy to supply to another company, including but not limited to costs for fuel, reactant, labor, operation, maintenance, start-up, fuel handling, taxes, emission allowances, and services provided by RTOs, ISOs, or other transmission providers such as transmission and ancillary services and losses. Such costs may also include costs paid to third parties where the SPS has an existing contractual entitlement to purchase energy.

- For intraday (real-time) transactions, incremental cost is determined through a review of hourly system characteristics.
- For non-intraday transactions, incremental cost is determined by using a resource optimization model such as, but not limited to ProSym, Cougar or GenTrader.

The forecasted incremental cost represents the relative increase in total variable cost, in comparison to the previously determined base variable cost. SPS forecasts incremental costs on a monthly, daily and hourly basis in order to evaluate whether it would be economic to engage in a wholesale sale of energy.<sup>2</sup> In order for SPS to transact, and sell power to another entity, the purchaser must be willing to pay no less than the forecasted incremental cost for the period during which the energy is sold. It is necessary to use forecasted costs because

---

<sup>2</sup> The Commission has found this approach to be acceptable. See, e.g., *Western Systems Power Pool*, 55 FERC ¶ 61,495 at 62,718 (1991) (noting that incremental cost "may be forecasted hourly, weekly, or monthly").

transactions are entered into in the market in advance. The forecast incremental costs for SPS utilize its unique portfolio resources, applicable fuel costs and generation characteristics.

Monthly forecasted incremental variable costs are developed utilizing an optimization and unit commitment model. Generation characteristics such as forecasted fuel prices, effective heat rates, system penalty factors, start-up costs, unit parameters (e.g., minimum run time, dispatch minimum, dispatch maximum), variable O&M, and tolling costs are utilized in the model to establish the base cost to serve a forecasted amount of obligation (load and the net of applicable firm purchase and sales transactions). Planned and forced outages are also considered in the model. Additional obligations are added to the model (consistent with blocks traded in the market), and the optimized costs are returned. The difference in costs between the first and second run, i.e., with and without an incremental transaction or load addition, will represent the incremental cost to serve the additional obligation. The forecasted incremental cost to serve the additional obligation will establish the minimum price required in order to engage in a sale of similar energy volume.

Daily forecasted incremental costs are developed utilizing a unit commitment and optimization program. The best available generation characteristics are utilized in the model to forecast the base cost to serve the next-day obligation. Additional obligations are applied and system costs evaluated to establish the forecasted cost to serve a potential incremental sale.

On an hourly basis, the system operator forecasts the incremental cost to serve an additional obligation by evaluating current system conditions and the resources that are not previously allocated to meet established obligations. If additional portfolio resources are available (not allocated for native load requirements), the system operator will evaluate the comprehensive cost to produce the quantity of energy needed for an incremental sale.

## WSPP AGREEMENT SCHEDULE Q FOR WESTAR ENERGY

### Determination of Ceiling Rates Applicable to Cost-Based Sales Made by Westar Energy under the WSPP Agreement

1. The following rates shall be applicable to any cost-based sale of power and/or energy made by Westar Energy ("Westar") (1) pursuant to the applicable terms and conditions of the WSPP Agreement, including under Service Schedule A (Economy Energy Service), Service Schedule B (Unit Commitment Service), and Service Schedule C (Firm Capacity/Energy Sale or Exchange Service) and (2) at a delivery point located within the Westar Energy balancing authority area.
2. The rates for any cost-based power and/or energy sale made by Westar Energy pursuant to the applicable terms and conditions of the WSPP Agreement from Westar Energy's generating resources shall not exceed the following:

(i) Maximum Demand Charge:

The Maximum Demand Charge shall be capped at either of the following methodologies:

Units Most Likely To Participate Methodology

Monthly	Up to \$13,520/MW
Weekly	Up to \$3,120/MW
Daily	Up to \$624/MW, provided, however, that the Daily rate of \$624/MW shall not exceed the product of the number of kilowatts sold for a week multiplied by the maximum weekly demand charge of \$3,120/MW.
Hourly	Up to \$39.00/MW, provided, however, that the hourly rate of \$39.00/MW shall not exceed the product of the number of kilowatts sold for a day multiplied by the maximum daily demand charge of \$624/MW, and also not exceed the product of the number of kilowatts sold for a week multiplied by the maximum weekly demand charge of \$3,120/MW.

- (ii) Energy Charge of no less than 100% of SIC, plus up to 10% of SIC; and
  - (iii) All charges incurred for transmission service, ancillary services, and transmission losses.
3. If Westar Energy enters into a purchased power transaction specifically for the purpose of reselling such power hereunder, the rates shall not exceed the sum of the following:

- (i) Westar Energy's out-of-pocket costs of purchasing such capacity and/or energy, including all related charges incurred for transmission service, ancillary services, transmission losses and any applicable taxes or other similar governmental impositions; and
  - (ii) \$1.00 per megawatt-hour multiplied by the total megawatt-hours scheduled.
- 4. System Incremental Costs ("SIC") means all reasonably forecasted costs of such power and/or energy and which otherwise would not have been incurred by Westar Energy including, but not limited to, costs associated with fuel, labor, variable operation and maintenance, start-up, shut-down, fuel handling, taxes or other similar governmental impositions, regulatory commission charges, emission allowances and other environmental compliance costs.
- 5. Purchasers in cost-based transactions shall also be responsible for any taxes, purchased power costs, and for any other costs incurred by Westar Energy in fulfilling its obligations for the provision of power and/or energy under the WSPP Agreement, which cost would otherwise not have been incurred, had such service not been provided.

## LIST OF MEMBERS

3 Phases Renewables Inc.  
AEP Energy Partners, Inc.  
Alameda Municipal Power  
Alcoa Power Marketing LLC  
American Electric Power Service Corporation as agent for Indiana Michigan Power Company  
American Electric Power Service Corporation as agent for Public Service Company of Oklahoma and  
Southwestern Electric Power Company  
Anahau Energy, LLC  
Arizona Electric Power Cooperative, Inc.  
Arizona Public Service Company  
Arkansas Electric Cooperative Corp.  
Associated Electric Cooperative, Inc.  
ATCO Power Canada Ltd.  
Avangrid Renewables, LLC  
Avista Corporation  
Basin Electric Power Cooperative  
Black Hills/Colorado Electric Utility Company, L.P.  
Black Hills Wyoming, Inc.  
Black Hills Power Inc.  
BNP Paribas Energy Trading GP  
Bonneville Power Administration  
Boston Energy Trading and Marketing LLC  
BP Energy Company  
Brookfield Energy Marketing LP  
California Department of Water Resources  
California Power Holdings, LLC  
CalPeak Power LLC  
Calpine Energy Services, L.P.  
Calpine Energy Solutions, LLC  
Cargill Power Markets, LLC  
Castleton Commodities Merchant Trading L.P.  
Central Arizona Water Conservation District  
Cheyenne Light, Fuel and Power  
Citigroup Energy Inc.  
City of Anaheim, Public Utilities Dept.  
City of Azusa, California  
City of Banning, California  
City of Burbank, California  
City of Cerritos (Cerritos Electric Utility)  
City of Colton, California  
City of Corona Department of Water and Power  
City of Farmington, New Mexico  
City of Gillette  
City of Glendale, California  
City of Independence, Missouri  
City of Iola, Kansas  
City of Lancaster  
City of Lodi Electric Utility  
City of Moreno Valley, California

City of Palo Alto, California  
City of Pasadena, California  
City of Rancho Cucamonga, California  
City of Redding, California  
City of Riverside, California  
City of Roseville, California  
City of Sikeston, Board of Municipal Utilities  
City of St. George Energy Service Department  
City of Vernon, California  
City of Wathena, Kansas  
Clatskanie People's Utility District  
Cleco Power LLC  
Cleco Utility Group, Inc.  
Colorado River Commission of Nevada  
Colorado Springs Utilities  
Columbia Power Corporation  
Comision Federal de Electricidad  
Commerce Energy, Inc.  
ConocoPhillips Company  
Constellation NewEnergy, Inc.  
Cooperative Energy, a Mississippi electric cooperative  
Covanta Energy Marketing, LLC  
CP Energy Marketing (US) Inc.  
Credit Suisse Energy LLC  
CWP Energy, Inc.  
Deseret G&T  
Direct Energy Business, LLC  
DTE Energy Trading, Inc.  
Dynergy Marketing and Trade, LLC  
Dynergy Power Marketing, LLC  
East Bay Municipal Utility District  
East Texas Electric Cooperative, Inc.  
EDF Trading North America, LLC  
Elk Hills Power, LLC  
El Paso Electric Company  
Empire District Electric Company  
Energy America , LLC  
Energy Keepers, Inc.  
Energy Transfer Group, LLC  
Energy Unlimited, Inc.  
Englehart CTP (US) LLC  
ENMAX Energy Corporation  
ENMAX Energy Marketing Inc.  
Entergy Services, Inc. (also Entergy Arkansas, Inc., Entergy Louisiana, LLC, Entergy Mississippi, Inc.,  
Entergy New Orleans, Inc., Entergy Texas, Inc.)  
Eugene Water & Electric Board  
ETC Endure Energy L.L.C.  
Exelon Generation Company, LLC  
FortisBC Inc.  
Freeport Commodities LLC  
Freeport-McMoRan Cooper & Gold Energy Services, LLC



GDF SUEZ Energy Marketing NA, Inc.  
GenOn Energy Management, LLC  
Gila River Power LLC  
Grays Harbor Energy LLC  
Great River Energy  
Golden Spread Electric Cooperative, Inc.  
Golden State Water Company  
Grand River Dam Authority  
Guzman Energy, LLC  
Guzman Renewable Energy Partners  
Harquahala Generating Company, LLC  
Hermiston Generating Company, L.P.  
Hetch Hetchy Water & Power  
Hinson Power Company, Inc.  
Idaho Falls Power  
Idaho Power Company  
Illinois Power Marketing Company  
Imperial Irrigation District  
Inland Empire Energy Center LLC  
J. Aron & Company  
Jonesboro City Water and Light  
J.P. Morgan Ventures Energy Corporation  
Kansas City Board of Public Utilities  
Kansas City Power & Light Company  
Kansas Power Pool  
KCP&L Greater Missouri Operations Company  
La Paloma Generating Company, LLC  
Lafayette Utilities System  
Las Vegas Power Company, LLC  
Lincoln Electric System  
Los Alamos County  
Los Angeles Department of Water and Power  
Louisiana Energy and Power Authority  
Louisville Gas & Electric Company  
Luminant Energy Company LLC  
Macquarie Energy LLC  
Malaga Power, LLC  
Manitoba Hydro  
Marin Clean Energy  
McMinnville Water & Light  
Mercuria Energy America, Inc.  
Merrill Lynch Commodities, Inc.  
Metropolitan Water District of Southern California  
MidAmerican Energy Company  
Midwest Energy, Inc.  
Missouri Joint Municipal Electric Utility Comm.  
Modesto Irrigation District  
Mohave Electric Cooperative, Inc.  
Morgan Stanley Capital Group, Inc.  
M-S-R Public Power Agency  
Municipal Energy Agency of Nebraska

NaturEner Power Watch, LLC  
Navajo Tribal Utility Authority  
Nebraska Public Power District  
NextEra Energy Marketing, LLC  
Nevada Power Company  
Newmont Nevada Energy Investments  
New West Energy  
Nexen Energy Marketing U.S.A. Inc.  
Noble Americas Gas & Power Corp.  
Northern California Power Agency  
Northern States Power Company  
Northern Wasco County People's Utility District  
NorthPoint Energy Solutions Inc.  
NorthWestern Corporation dba NorthWestern Energy  
NRG Power Marketing LLC  
Occidental Power Services, Inc.  
Oklahoma Gas & Electric Company  
Oklahoma Municipal Power Authority  
Omaha Public Power District  
Ontario Power Generation Inc.  
Otter Tail Power Company  
Pacific Gas & Electric Company  
Pacific Summit Energy LLC  
PacifiCorp  
Patua Acquisition Company, LLC  
Peninsula Clean Energy Authority  
PG&E Energy Services  
PG&E Energy Trading - Power, L.P.  
Pittsburg Power Company  
Plumas-Sierra Rural Electric Cooperative  
Plains Electric Generation and Transmission Cooperative, Inc.  
Platte River Power Authority  
PNGC Power  
Port of Oakland  
Portland General Electric  
Power and Water Resources Pooling Authority  
Power Company of America, L.P.  
Power Resources Cooperative  
Powerex Corp.  
Public Service Company of New Mexico  
Public Service Company of Colorado  
Public Utility District No. 1 of Benton County  
Public Utility District No. 1 of Chelan County  
Public Utility District No. 1 of Clark County  
Public Utility District No. 1 of Cowlitz County  
Public Utility District No. 1 of Douglas County  
Public Utility District No. 1 of Franklin County  
Public Utility District No. 1 of Grays Harbor County  
Public Utility District No. 1 of Klickitat County  
Public Utility District No. 1 of Lewis County  
Public Utility District No. 1 of Okanogan County

Public Utility District No. 1 of Pend Oreille County  
Public Utility District No. 1 of Snohomish County  
Public Utility District No. 2 of Grant County  
Public Utility District No. 3 of Mason County  
Puget Sound Energy  
Rainbow Energy Marketing Corporation  
Reliant Energy Services, Inc.  
Renewable Power Strategies LLC dba RPS Advisors  
Rising Tree Wind Farm LLC  
Royal Bank of Canada  
RWE Trading Americas Inc.  
Sacramento Municipal Utility District  
Safeway Inc.  
Saguaro Power Company  
Salt River Project Agricultural Improvement and Power District  
Salton Sea Power L.L.C.  
San Diego Gas & Electric Co.  
San Geronio Farms, Inc.  
Seattle City Light  
Sempra Gas & Power Marketing LLC  
Shell Energy North America (US), L.P.  
Sierra Pacific Power Co.  
Silicon Valley Clean Energy Authority  
Silicon Valley Power  
Silver State Energy Association  
Skylar Energy LP  
Skylar Resources, LP  
Sonoma Clean Power Authority  
Southern Calif. Edison Co.  
Southern California Public Power Authority  
Southern Company Services, Inc., as agent for: Alabama Power Company, Georgia Power Company,  
Gulf Power Company, Mississippi Power Company and Southern Power Company  
Southern Illinois Power Cooperative  
Southern Nevada Water Authority  
Southwestern Power Administration  
Southwestern Public Service Company  
Sulphur Springs Valley Electric Cooperative, Inc.  
Sunflower Electric Power Corp.  
Tacoma Power  
Talen Energy Marketing, LLC  
Talen Montana, LLC  
Teck Metals Ltd.  
Tenaska Power Services Co.  
Tennessee Valley Authority  
TGP Energy Management, LLC  
The Energy Authority, Inc.  
TransAlta Energy Marketing (US) Inc.  
TransCanada Energy Sales Ltd.  
Trico Electric Cooperative, Inc.  
Tri-State Generation and Transmission Association, Inc.  
Tucson Electric Power Company

Turlock Irrigation District  
Twin Eagle Resource Management, LLC  
Union Electric Company d/b/a Ameren Missouri  
Union Power Partners, L.P.  
UNS Electric Inc.  
Utah Associated Municipal Power Systems  
Utah Municipal Power Agency  
Valley Electric Association, Inc.  
Vantage Wind Energy LLC  
Vitol Inc.  
WAPA-Colorado River Storage Project  
WAPA-Desert Southwest Region  
WAPA – Rocky Mountain Region (LAP)  
WAPA-Upper Great Plains Region  
WAPA-Sierra Nevada Region  
Westar Energy, Inc.  
Western Farmers Electric Coop.  
Western Power Services, Inc.  
WTMPA/City of Lubbock (Lubbock Power & Light)

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# Master Power Purchase & Sale Agreement

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Version 2.1 (modified 4/25/00)

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# MASTER POWER PURCHASE AND SALES AGREEMENT

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# MASTER POWER PURCHASE AND SALE AGREEMENT

## COVER SHEET

This *Master Power Purchase and Sale Agreement* ("Master Agreement" ) is made as of the following date: \_\_\_\_\_ ("Effective Date"). The *Master Agreement*, together with the exhibits, schedules and any written supplements hereto, the Party A Tariff, if any, the Party B Tariff, if any, any designated collateral, credit support or margin agreement or similar arrangement between the Parties and all Transactions (including any confirmations accepted in accordance with Section 2.3 hereto) shall be referred to as the "Agreement." The Parties to this *Master Agreement* are the following:

Name ("\_\_\_\_\_ " or "Party A")

Name ("Counterparty" or "Party B")

All Notices:

All Notices:

Street: \_\_\_\_\_

Street: \_\_\_\_\_

City: \_\_\_\_\_ Zip: \_\_\_\_\_

City: \_\_\_\_\_ Zip: \_\_\_\_\_

Attn: Contract Administration

Attn: Contract Administration

Phone: \_\_\_\_\_

Phone: \_\_\_\_\_

Facsimile: \_\_\_\_\_

Facsimile: \_\_\_\_\_

Duns: \_\_\_\_\_

Duns: \_\_\_\_\_

Federal Tax ID Number: \_\_\_\_\_

Federal Tax ID Number: \_\_\_\_\_

**Invoices:**

**Invoices:**

Attn: \_\_\_\_\_

Attn: \_\_\_\_\_

Phone: \_\_\_\_\_

Phone: \_\_\_\_\_

Facsimile: \_\_\_\_\_

Facsimile: \_\_\_\_\_

**Scheduling:**

**Scheduling:**

Attn: \_\_\_\_\_

Attn: \_\_\_\_\_

Phone: \_\_\_\_\_

Phone: \_\_\_\_\_

Facsimile: \_\_\_\_\_

Facsimile: \_\_\_\_\_

**Payments:**

**Payments:**

Attn: \_\_\_\_\_

Attn: \_\_\_\_\_

Phone: \_\_\_\_\_

Phone: \_\_\_\_\_

Facsimile: \_\_\_\_\_

Facsimile: \_\_\_\_\_

**Wire Transfer:**

**Wire Transfer:**

BNK: \_\_\_\_\_

BNK: \_\_\_\_\_

ABA: \_\_\_\_\_

ABA: \_\_\_\_\_

ACCT: \_\_\_\_\_

ACCT: \_\_\_\_\_

**Credit and Collections:**

**Credit and Collections:**

Attn: \_\_\_\_\_

Attn: \_\_\_\_\_

Phone: \_\_\_\_\_

Phone: \_\_\_\_\_

Facsimile: \_\_\_\_\_

Facsimile: \_\_\_\_\_

With additional Notices of an Event of Default or Potential Event of Default to:

With additional Notices of an Event of Default or Potential Event of Default to:

Attn: \_\_\_\_\_

Attn: \_\_\_\_\_

Phone: \_\_\_\_\_

Phone: \_\_\_\_\_

Facsimile: \_\_\_\_\_

Facsimile: \_\_\_\_\_



The Parties hereby agree that the General Terms and Conditions are incorporated herein, and to the following provisions as provided for in the General Terms and Conditions:

Party A Tariff      Tariff \_\_\_\_\_      Dated \_\_\_\_\_      Docket Number \_\_\_\_\_

Party B Tariff      Tariff \_\_\_\_\_      Dated \_\_\_\_\_      Docket Number \_\_\_\_\_

---

**Article Two**

Transaction Terms and Conditions       Optional provision in Section 2.4. If not checked, inapplicable.

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**Article Four**

Remedies for Failure to Deliver or Receive       Accelerated Payment of Damages. If not checked, inapplicable.

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**Article Five**

Events of Default; Remedies

Cross Default for Party A:

Party A: \_\_\_\_\_      Cross Default Amount \$ \_\_\_\_\_

Other Entity: \_\_\_\_\_      Cross Default Amount \$ \_\_\_\_\_

Cross Default for Party B:

Party B: \_\_\_\_\_      Cross Default Amount \$ \_\_\_\_\_

Other Entity: \_\_\_\_\_      Cross Default Amount \$ \_\_\_\_\_

5.6 Closeout Setoff

Option A (Applicable if no other selection is made.)

Option B - Affiliates shall have the meaning set forth in the Agreement unless otherwise specified as follows: \_\_\_\_\_

Option C (No Setoff)

---

**Article 8**

Credit and Collateral Requirements

8.1 Party A Credit Protection:

(a) Financial Information:

Option A

Option B Specify: \_\_\_\_\_

Option C Specify: \_\_\_\_\_

(b) Credit Assurances:

Not Applicable

Applicable

(c) Collateral Threshold:

Not Applicable

Applicable

If applicable, complete the following:

Party B Collateral Threshold: \$ \_\_\_\_\_; provided, however, that Party B's Collateral Threshold shall be zero if an Event of Default or Potential Event of Default with respect to Party B has occurred and is continuing.

Party B Independent Amount: \$ \_\_\_\_\_

Party B Rounding Amount: \$ \_\_\_\_\_

(d) Downgrade Event:

- Not Applicable
- Applicable

If applicable, complete the following:

- It shall be a Downgrade Event for Party B if Party B's Credit-Rating falls below \_\_\_\_\_ from S&P or \_\_\_\_\_ from Moody's or if Party B is not rated by either S&P or Moody's

- Other:  
Specify: \_\_\_\_\_

(e) Guarantor for Party B: \_\_\_\_\_

Guarantee Amount: \_\_\_\_\_

**8.2 Party B Credit Protection:**

(a) Financial Information:

- Option A
- Option B Specify: \_\_\_\_\_
- Option C Specify: \_\_\_\_\_

(b) Credit Assurances:

- Not Applicable
- Applicable

(c) Collateral Threshold:

- Not Applicable
- Applicable

If applicable, complete the following:

Party A Collateral Threshold: \$ \_\_\_\_\_; provided, however, that Party A's Collateral Threshold shall be zero if an Event of Default or Potential Event of Default with respect to Party A has occurred and is continuing.

Party A Independent Amount: \$ \_\_\_\_\_

Party A Rounding Amount: \$ \_\_\_\_\_

(d) Downgrade Event:

- Not Applicable
- Applicable

If applicable, complete the following:

- It shall be a Downgrade Event for Party A if Party A's Credit Rating falls below \_\_\_\_\_ from S&P or \_\_\_\_\_ from Moody's or if Party A is not rated by either S&P or Moody's
- Other:  
Specify: \_\_\_\_\_

(e) Guarantor for Party A: \_\_\_\_\_

Guarantee Amount: \_\_\_\_\_

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**Article 10**

Confidentiality

- Confidentiality Applicable      If not checked, inapplicable.

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**Schedule M**

- Party A is a Governmental Entity or Public Power System
- Party B is a Governmental Entity or Public Power System
- Add Section 3.6. If not checked, inapplicable
- Add Section 8.6. If not checked, inapplicable

**Other Changes**

Specify, if any: \_\_\_\_\_

IN WITNESS WHEREOF, the Parties have caused this Master Agreement to be duly executed as of the date first above written.

Party A Name

Party B Name

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

**DISCLAIMER:** This Master Power Purchase and Sale Agreement was prepared by a committee of representatives of Edison Electric Institute (“EEI”) and National Energy Marketers Association (“NEM”) member companies to facilitate orderly trading in and development of wholesale power markets. Neither EEI nor NEM nor any member company nor any of their agents, representatives or attorneys shall be responsible for its use, or any damages resulting therefrom. By providing this Agreement EEI and NEM do not offer legal advice and all users are urged to consult their own legal counsel to ensure that their commercial objectives will be achieved and their legal interests are adequately protected.

## GENERAL TERMS AND CONDITIONS

### ARTICLE ONE: GENERAL DEFINITIONS

1.1 "Affiliate" means, with respect to any person, any other person (other than an individual) that, directly or indirectly, through one or more intermediaries, controls, or is controlled by, or is under common control with, such person. For this purpose, "control" means the direct or indirect ownership of fifty percent (50%) or more of the outstanding capital stock or other equity interests having ordinary voting power.

1.2 "Agreement" has the meaning set forth in the Cover Sheet.

1.3 "Bankrupt" means with respect to any entity, such entity (i) files a petition or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause of action under any bankruptcy, insolvency, reorganization or similar law, or has any such petition filed or commenced against it, (ii) makes an assignment or any general arrangement for the benefit of creditors, (iii) otherwise becomes bankrupt or insolvent (however evidenced), (iv) has a liquidator, administrator, receiver, trustee, conservator or similar official appointed with respect to it or any substantial portion of its property or assets, or (v) is generally unable to pay its debts as they fall due.

1.4 "Business Day" means any day except a Saturday, Sunday, or a Federal Reserve Bank holiday. A Business Day shall open at 8:00 a.m. and close at 5:00 p.m. local time for the relevant Party's principal place of business. The relevant Party, in each instance unless otherwise specified, shall be the Party from whom the notice, payment or delivery is being sent and by whom the notice or payment or delivery is to be received.

1.5 "Buyer" means the Party to a Transaction that is obligated to purchase and receive, or cause to be received, the Product, as specified in the Transaction.

1.6 "Call Option" means an Option entitling, but not obligating, the Option Buyer to purchase and receive the Product from the Option Seller at a price equal to the Strike Price for the Delivery Period for which the Option may be exercised, all as specified in the Transaction. Upon proper exercise of the Option by the Option Buyer, the Option Seller will be obligated to sell and deliver the Product for the Delivery Period for which the Option has been exercised.

1.7 "Claiming Party" has the meaning set forth in Section 3.3.

1.8 "Claims" means all third party claims or actions, threatened or filed and, whether groundless, false, fraudulent or otherwise, that directly or indirectly relate to the subject matter of an indemnity, and the resulting losses, damages, expenses, attorneys' fees and court costs, whether incurred by settlement or otherwise, and whether such claims or actions are threatened or filed prior to or after the termination of this Agreement.

1.9 "Confirmation" has the meaning set forth in Section 2.3.

1.10 “Contract Price” means the price in \$U.S. (unless otherwise provided for) to be paid by Buyer to Seller for the purchase of the Product, as specified in the Transaction.

1.11 “Costs” means, with respect to the Non-Defaulting Party, brokerage fees, commissions and other similar third party transaction costs and expenses reasonably incurred by such Party either in terminating any arrangement pursuant to which it has hedged its obligations or entering into new arrangements which replace a Terminated Transaction; and all reasonable attorneys’ fees and expenses incurred by the Non-Defaulting Party in connection with the termination of a Transaction.

1.12 “Credit Rating” means, with respect to any entity, the rating then assigned to such entity’s unsecured, senior long-term debt obligations (not supported by third party credit enhancements) or if such entity does not have a rating for its senior unsecured long-term debt, then the rating then assigned to such entity as an issues rating by S&P, Moody’s or any other rating agency agreed by the Parties as set forth in the Cover Sheet.

1.13 “Cross Default Amount” means the cross default amount, if any, set forth in the Cover Sheet for a Party.

1.14 “Defaulting Party” has the meaning set forth in Section 5.1.

1.15 “Delivery Period” means the period of delivery for a Transaction, as specified in the Transaction.

1.16 “Delivery Point” means the point at which the Product will be delivered and received, as specified in the Transaction.

1.17 “Downgrade Event” has the meaning set forth on the Cover Sheet.

1.18 “Early Termination Date” has the meaning set forth in Section 5.2.

1.19 “Effective Date” has the meaning set forth on the Cover Sheet.

1.20 “Equitable Defenses” means any bankruptcy, insolvency, reorganization and other laws affecting creditors’ rights generally, and with regard to equitable remedies, the discretion of the court before which proceedings to obtain same may be pending.

1.21 “Event of Default” has the meaning set forth in Section 5.1.

1.22 “FERC” means the Federal Energy Regulatory Commission or any successor government agency.

1.23 “Force Majeure” means an event or circumstance which prevents one Party from performing its obligations under one or more Transactions, which event or circumstance was not anticipated as of the date the Transaction was agreed to, which is not within the reasonable control of, or the result of the negligence of, the Claiming Party, and which, by the exercise of due diligence, the Claiming Party is unable to overcome or avoid or cause to be avoided. Force Majeure shall not be based on (i) the loss of Buyer’s markets; (ii) Buyer’s inability economically

to use or resell the Product purchased hereunder; (iii) the loss or failure of Seller's supply; or (iv) Seller's ability to sell the Product at a price greater than the Contract Price. Neither Party may raise a claim of Force Majeure based in whole or in part on curtailment by a Transmission Provider unless (i) such Party has contracted for firm transmission with a Transmission Provider for the Product to be delivered to or received at the Delivery Point and (ii) such curtailment is due to "force majeure" or "uncontrollable force" or a similar term as defined under the Transmission Provider's tariff; provided, however, that existence of the foregoing factors shall not be sufficient to conclusively or presumptively prove the existence of a Force Majeure absent a showing of other facts and circumstances which in the aggregate with such factors establish that a Force Majeure as defined in the first sentence hereof has occurred. The applicability of Force Majeure to the Transaction is governed by the terms of the Products and Related Definitions contained in Schedule P.

1.24 "Gains" means, with respect to any Party, an amount equal to the present value of the economic benefit to it, if any (exclusive of Costs), resulting from the termination of a Terminated Transaction, determined in a commercially reasonable manner.

1.25 "Guarantor" means, with respect to a Party, the guarantor, if any, specified for such Party on the Cover Sheet.

1.26 "Interest Rate" means, for any date, the lesser of (a) the per annum rate of interest equal to the prime lending rate as may from time to time be published in *The Wall Street Journal* under "Money Rates" on such day (or if not published on such day on the most recent preceding day on which published), plus two percent (2%) and (b) the maximum rate permitted by applicable law.

1.27 "Letter(s) of Credit" means one or more irrevocable, transferable standby letters of credit issued by a U.S. commercial bank or a foreign bank with a U.S. branch with such bank having a credit rating of at least A- from S&P or A3 from Moody's, in a form acceptable to the Party in whose favor the letter of credit is issued. Costs of a Letter of Credit shall be borne by the applicant for such Letter of Credit.

1.28 "Losses" means, with respect to any Party, an amount equal to the present value of the economic loss to it, if any (exclusive of Costs), resulting from termination of a Terminated Transaction, determined in a commercially reasonable manner.

1.29 "Master Agreement" has the meaning set forth on the Cover Sheet.

1.30 "Moody's" means Moody's Investor Services, Inc. or its successor.

1.31 "NERC Business Day" means any day except a Saturday, Sunday or a holiday as defined by the North American Electric Reliability Council or any successor organization thereto. A NERC Business Day shall open at 8:00 a.m. and close at 5:00 p.m. local time for the relevant Party's principal place of business. The relevant Party, in each instance unless otherwise specified, shall be the Party from whom the notice, payment or delivery is being sent and by whom the notice or payment or delivery is to be received.

1.32 "Non-Defaulting Party" has the meaning set forth in Section 5.2.

1.33 "Offsetting Transactions" mean any two or more outstanding Transactions, having the same or overlapping Delivery Period(s), Delivery Point and payment date, where under one or more of such Transactions, one Party is the Seller, and under the other such Transaction(s), the same Party is the Buyer.

1.34 "Option" means the right but not the obligation to purchase or sell a Product as specified in a Transaction.

1.35 "Option Buyer" means the Party specified in a Transaction as the purchaser of an option, as defined in Schedule P.

1.36 "Option Seller" means the Party specified in a Transaction as the seller of an option, as defined in Schedule P.

1.37 "Party A Collateral Threshold" means the collateral threshold, if any, set forth in the Cover Sheet for Party A.

1.38 "Party B Collateral Threshold" means the collateral threshold, if any, set forth in the Cover Sheet for Party B.

1.39 "Party A Independent Amount" means the amount, if any, set forth in the Cover Sheet for Party A.

1.40 "Party B Independent Amount" means the amount, if any, set forth in the Cover Sheet for Party B.

1.41 "Party A Rounding Amount" means the amount, if any, set forth in the Cover Sheet for Party A.

1.42 "Party B Rounding Amount" means the amount, if any, set forth in the Cover Sheet for Party B.

1.43 "Party A Tariff" means the tariff, if any, specified in the Cover Sheet for Party A.

1.44 "Party B Tariff" means the tariff, if any, specified in the Cover Sheet for Party B.

1.45 "Performance Assurance" means collateral in the form of either cash, Letter(s) of Credit, or other security acceptable to the Requesting Party.

1.46 "Potential Event of Default" means an event which, with notice or passage of time or both, would constitute an Event of Default.

1.47 "Product" means electric capacity, energy or other product(s) related thereto as specified in a Transaction by reference to a Product listed in Schedule P hereto or as otherwise specified by the Parties in the Transaction.



1.48 “Put Option” means an Option entitling, but not obligating, the Option Buyer to sell and deliver the Product to the Option Seller at a price equal to the Strike Price for the Delivery Period for which the option may be exercised; all as specified in a Transaction. Upon proper exercise of the Option by the Option Buyer, the Option Seller will be obligated to purchase and receive the Product.

1.49 “Quantity” means that quantity of the Product that Seller agrees to make available or sell and deliver, or cause to be delivered, to Buyer, and that Buyer agrees to purchase and receive, or cause to be received, from Seller as specified in the Transaction.

1.50 “Recording” has the meaning set forth in Section 2.4.

1.51 “Replacement Price” means the price at which Buyer, acting in a commercially reasonable manner, purchases at the Delivery Point a replacement for any Product specified in a Transaction but not delivered by Seller, plus (i) costs reasonably incurred by Buyer in purchasing such substitute Product and (ii) additional transmission charges, if any, reasonably incurred by Buyer to the Delivery Point, or at Buyer’s option, the market price at the Delivery Point for such Product not delivered as determined by Buyer in a commercially reasonable manner; provided, however, in no event shall such price include any penalties, ratcheted demand or similar charges, nor shall Buyer be required to utilize or change its utilization of its owned or controlled assets or market positions to minimize Seller’s liability. For the purposes of this definition, Buyer shall be considered to have purchased replacement Product to the extent Buyer shall have entered into one or more arrangements in a commercially reasonable manner whereby Buyer repurchases its obligation to sell and deliver the Product to another party at the Delivery Point.

1.52 “S&P” means the Standard & Poor’s Rating Group (a division of McGraw-Hill, Inc.) or its successor.

1.53 “Sales Price” means the price at which Seller, acting in a commercially reasonable manner, resells at the Delivery Point any Product not received by Buyer, deducting from such proceeds any (i) costs reasonably incurred by Seller in reselling such Product and (ii) additional transmission charges, if any, reasonably incurred by Seller in delivering such Product to the third party purchasers, or at Seller’s option, the market price at the Delivery Point for such Product not received as determined by Seller in a commercially reasonable manner; provided, however, in no event shall such price include any penalties, ratcheted demand or similar charges, nor shall Seller be required to utilize or change its utilization of its owned or controlled assets, including contractual assets, or market positions to minimize Buyer’s liability. For purposes of this definition, Seller shall be considered to have resold such Product to the extent Seller shall have entered into one or more arrangements in a commercially reasonable manner whereby Seller repurchases its obligation to purchase and receive the Product from another party at the Delivery Point.

1.54 “Schedule” or “Scheduling” means the actions of Seller, Buyer and/or their designated representatives, including each Party’s Transmission Providers, if applicable, of notifying, requesting and confirming to each other the quantity and type of Product to be delivered on any given day or days during the Delivery Period at a specified Delivery Point.

1.55 "Seller" means the Party to a Transaction that is obligated to sell and deliver, or cause to be delivered, the Product, as specified in the Transaction.

1.56 "Settlement Amount" means, with respect to a Transaction and the Non-Defaulting Party, the Losses or Gains, and Costs, expressed in U.S. Dollars, which such party incurs as a result of the liquidation of a Terminated Transaction pursuant to Section 5.2.

1.57 "Strike Price" means the price to be paid for the purchase of the Product pursuant to an Option.

1.58 "Terminated Transaction" has the meaning set forth in Section 5.2.

1.59 "Termination Payment" has the meaning set forth in Section 5.3.

1.60 "Transaction" means a particular transaction agreed to by the Parties relating to the sale and purchase of a Product pursuant to this Master Agreement.

1.61 "Transmission Provider" means any entity or entities transmitting or transporting the Product on behalf of Seller or Buyer to or from the Delivery Point in a particular Transaction.

## ARTICLE TWO: TRANSACTION TERMS AND CONDITIONS

2.1 Transactions. A Transaction shall be entered into upon agreement of the Parties orally or, if expressly required by either Party with respect to a particular Transaction, in writing, including an electronic means of communication. Each Party agrees not to contest, or assert any defense to, the validity or enforceability of the Transaction entered into in accordance with this Master Agreement (i) based on any law requiring agreements to be in writing or to be signed by the parties, or (ii) based on any lack of authority of the Party or any lack of authority of any employee of the Party to enter into a Transaction.

2.2 Governing Terms. Unless otherwise specifically agreed, each Transaction between the Parties shall be governed by this Master Agreement. This Master Agreement (including all exhibits, schedules and any written supplements hereto), the Party A Tariff, if any, and the Party B Tariff, if any, any designated collateral, credit support or margin agreement or similar arrangement between the Parties and all Transactions (including any Confirmations accepted in accordance with Section 2.3) shall form a single integrated agreement between the Parties. Any inconsistency between any terms of this Master Agreement and any terms of the Transaction shall be resolved in favor of the terms of such Transaction.

2.3 Confirmation. Seller may confirm a Transaction by forwarding to Buyer by facsimile within three (3) Business Days after the Transaction is entered into a confirmation ("Confirmation") substantially in the form of Exhibit A. If Buyer objects to any term(s) of such Confirmation, Buyer shall notify Seller in writing of such objections within two (2) Business Days of Buyer's receipt thereof, failing which Buyer shall be deemed to have accepted the terms as sent. If Seller fails to send a Confirmation within three (3) Business Days after the Transaction is entered into, a Confirmation substantially in the form of Exhibit A, may be forwarded by Buyer to Seller. If Seller objects to any term(s) of such Confirmation, Seller shall notify Buyer of such objections within two (2) Business Days of Seller's receipt thereof, failing

which Seller shall be deemed to have accepted the terms as sent. If Seller and Buyer each send a Confirmation and neither Party objects to the other Party's Confirmation within two (2) Business Days of receipt, Seller's Confirmation shall be deemed to be accepted and shall be the controlling Confirmation, unless (i) Seller's Confirmation was sent more than three (3) Business Days after the Transaction was entered into and (ii) Buyer's Confirmation was sent prior to Seller's Confirmation, in which case Buyer's Confirmation shall be deemed to be accepted and shall be the controlling Confirmation. Failure by either Party to send or either Party to return an executed Confirmation or any objection by either Party shall not invalidate the Transaction agreed to by the Parties.

2.4 Additional Confirmation Terms. If the Parties have elected on the Cover Sheet to make this Section 2.4 applicable to this Master Agreement, when a Confirmation contains provisions, other than those provisions relating to the commercial terms of the Transaction (e.g., price or special transmission conditions), which modify or supplement the general terms and conditions of this Master Agreement (e.g., arbitration provisions or additional representations and warranties), such provisions shall not be deemed to be accepted pursuant to Section 2.3 unless agreed to either orally or in writing by the Parties; provided that the foregoing shall not invalidate any Transaction agreed to by the Parties.

2.5 Recording. Unless a Party expressly objects to a Recording (defined below) at the beginning of a telephone conversation, each Party consents to the creation of a tape or electronic recording ("Recording") of all telephone conversations between the Parties to this Master Agreement, and that any such Recordings will be retained in confidence, secured from improper access, and may be submitted in evidence in any proceeding or action relating to this Agreement. Each Party waives any further notice of such monitoring or recording, and agrees to notify its officers and employees of such monitoring or recording and to obtain any necessary consent of such officers and employees. The Recording, and the terms and conditions described therein, if admissible, shall be the controlling evidence for the Parties' agreement with respect to a particular Transaction in the event a Confirmation is not fully executed (or deemed accepted) by both Parties. Upon full execution (or deemed acceptance) of a Confirmation, such Confirmation shall control in the event of any conflict with the terms of a Recording, or in the event of any conflict with the terms of this Master Agreement.

### **ARTICLE THREE: OBLIGATIONS AND DELIVERIES**

3.1 Seller's and Buyer's Obligations. With respect to each Transaction, Seller shall sell and deliver, or cause to be delivered, and Buyer shall purchase and receive, or cause to be received, the Quantity of the Product at the Delivery Point, and Buyer shall pay Seller the Contract Price; provided, however, with respect to Options, the obligations set forth in the preceding sentence shall only arise if the Option Buyer exercises its Option in accordance with its terms. Seller shall be responsible for any costs or charges imposed on or associated with the Product or its delivery of the Product up to the Delivery Point. Buyer shall be responsible for any costs or charges imposed on or associated with the Product or its receipt at and from the Delivery Point.

3.2 Transmission and Scheduling. Seller shall arrange and be responsible for transmission service to the Delivery Point and shall Schedule or arrange for Scheduling services

with its Transmission Providers, as specified by the Parties in the Transaction, or in the absence thereof, in accordance with the practice of the Transmission Providers, to deliver the Product to the Delivery Point. Buyer shall arrange and be responsible for transmission service at and from the Delivery Point and shall Schedule or arrange for Scheduling services with its Transmission Providers to receive the Product at the Delivery Point.

3.3 Force Majeure. To the extent either Party is prevented by Force Majeure from carrying out, in whole or part, its obligations under the Transaction and such Party (the "Claiming Party") gives notice and details of the Force Majeure to the other Party as soon as practicable, then, unless the terms of the Product specify otherwise, the Claiming Party shall be excused from the performance of its obligations with respect to such Transaction (other than the obligation to make payments then due or becoming due with respect to performance prior to the Force Majeure). The Claiming Party shall remedy the Force Majeure with all reasonable dispatch. The non-Claiming Party shall not be required to perform or resume performance of its obligations to the Claiming Party corresponding to the obligations of the Claiming Party excused by Force Majeure.

#### **ARTICLE FOUR: REMEDIES FOR FAILURE TO DELIVER/RECEIVE**

4.1 Seller Failure. If Seller fails to schedule and/or deliver all or part of the Product pursuant to a Transaction, and such failure is not excused under the terms of the Product or by Buyer's failure to perform, then Seller shall pay Buyer, on the date payment would otherwise be due in respect of the month in which the failure occurred or, if "Accelerated Payment of Damages" is specified on the Cover Sheet, within five (5) Business Days of invoice receipt, an amount for such deficiency equal to the positive difference, if any, obtained by subtracting the Contract Price from the Replacement Price. The invoice for such amount shall include a written statement explaining in reasonable detail the calculation of such amount.

4.2 Buyer Failure. If Buyer fails to schedule and/or receive all or part of the Product pursuant to a Transaction and such failure is not excused under the terms of the Product or by Seller's failure to perform, then Buyer shall pay Seller, on the date payment would otherwise be due in respect of the month in which the failure occurred or, if "Accelerated Payment of Damages" is specified on the Cover Sheet, within five (5) Business Days of invoice receipt, an amount for such deficiency equal to the positive difference, if any, obtained by subtracting the Sales Price from the Contract Price. The invoice for such amount shall include a written statement explaining in reasonable detail the calculation of such amount.

#### **ARTICLE FIVE: EVENTS OF DEFAULT; REMEDIES**

5.1 Events of Default. An "Event of Default" shall mean, with respect to a Party (a "Defaulting Party"), the occurrence of any of the following:

- (a) the failure to make, when due, any payment required pursuant to this Agreement if such failure is not remedied within three (3) Business Days after written notice;

- (b) any representation or warranty made by such Party herein is false or misleading in any material respect when made or when deemed made or repeated;
- (c) the failure to perform any material covenant or obligation set forth in this Agreement (except to the extent constituting a separate Event of Default, and except for such Party's obligations to deliver or receive the Product, the exclusive remedy for which is provided in Article Four) if such failure is not remedied within three (3) Business Days after written notice;
- (d) such Party becomes Bankrupt;
- (e) the failure of such Party to satisfy the creditworthiness/collateral requirements agreed to pursuant to Article Eight hereof;
- (f) such Party consolidates or amalgamates with, or merges with or into, or transfers all or substantially all of its assets to, another entity and, at the time of such consolidation, amalgamation, merger or transfer, the resulting, surviving or transferee entity fails to assume all the obligations of such Party under this Agreement to which it or its predecessor was a party by operation of law or pursuant to an agreement reasonably satisfactory to the other Party;
- (g) if the applicable cross default section in the Cover Sheet is indicated for such Party, the occurrence and continuation of (i) a default, event of default or other similar condition or event in respect of such Party or any other party specified in the Cover Sheet for such Party under one or more agreements or instruments, individually or collectively, relating to indebtedness for borrowed money in an aggregate amount of not less than the applicable Cross Default Amount (as specified in the Cover Sheet), which results in such indebtedness becoming, or becoming capable at such time of being declared, immediately due and payable or (ii) a default by such Party or any other party specified in the Cover Sheet for such Party in making on the due date therefor one or more payments, individually or collectively, in an aggregate amount of not less than the applicable Cross Default Amount (as specified in the Cover Sheet);
- (h) with respect to such Party's Guarantor, if any:
  - (i) if any representation or warranty made by a Guarantor in connection with this Agreement is false or misleading in any material respect when made or when deemed made or repeated;
  - (ii) the failure of a Guarantor to make any payment required or to perform any other material covenant or obligation in any guaranty made in connection with this Agreement and such failure shall not be remedied within three (3) Business Days after written notice;

- (iii) a Guarantor becomes Bankrupt;
- (iv) the failure of a Guarantor's guaranty to be in full force and effect for purposes of this Agreement (other than in accordance with its terms) prior to the satisfaction of all obligations of such Party under each Transaction to which such guaranty shall relate without the written consent of the other Party; or
- (v) a Guarantor shall repudiate, disaffirm, disclaim, or reject, in whole or in part, or challenge the validity of any guaranty.

5.2 Declaration of an Early Termination Date and Calculation of Settlement Amounts. If an Event of Default with respect to a Defaulting Party shall have occurred and be continuing, the other Party (the "Non-Defaulting Party") shall have the right (i) to designate a day, no earlier than the day such notice is effective and no later than 20 days after such notice is effective, as an early termination date ("Early Termination Date") to accelerate all amounts owing between the Parties and to liquidate and terminate all, but not less than all, Transactions (each referred to as a "Terminated Transaction") between the Parties, (ii) withhold any payments due to the Defaulting Party under this Agreement and (iii) suspend performance. The Non-Defaulting Party shall calculate, in a commercially reasonable manner, a Settlement Amount for each such Terminated Transaction as of the Early Termination Date (or, to the extent that in the reasonable opinion of the Non-Defaulting Party certain of such Terminated Transactions are commercially impracticable to liquidate and terminate or may not be liquidated and terminated under applicable law on the Early Termination Date, as soon thereafter as is reasonably practicable).

5.3 Net Out of Settlement Amounts. The Non-Defaulting Party shall aggregate all Settlement Amounts into a single amount by: netting out (a) all Settlement Amounts that are due to the Defaulting Party, plus, at the option of the Non-Defaulting Party, any cash or other form of security then available to the Non-Defaulting Party pursuant to Article Eight, plus any or all other amounts due to the Defaulting Party under this Agreement against (b) all Settlement Amounts that are due to the Non-Defaulting Party, plus any or all other amounts due to the Non-Defaulting Party under this Agreement, so that all such amounts shall be netted out to a single liquidated amount (the "Termination Payment") payable by one Party to the other. The Termination Payment shall be due to or due from the Non-Defaulting Party as appropriate.

5.4 Notice of Payment of Termination Payment. As soon as practicable after a liquidation, notice shall be given by the Non-Defaulting Party to the Defaulting Party of the amount of the Termination Payment and whether the Termination Payment is due to or due from the Non-Defaulting Party. The notice shall include a written statement explaining in reasonable detail the calculation of such amount. The Termination Payment shall be made by the Party that owes it within two (2) Business Days after such notice is effective.

5.5 Disputes With Respect to Termination Payment. If the Defaulting Party disputes the Non-Defaulting Party's calculation of the Termination Payment, in whole or in part, the Defaulting Party shall, within two (2) Business Days of receipt of Non-Defaulting Party's calculation of the Termination Payment, provide to the Non-Defaulting Party a detailed written

explanation of the basis for such dispute; provided, however, that if the Termination Payment is due from the Defaulting Party, the Defaulting Party shall first transfer Performance Assurance to the Non-Defaulting Party in an amount equal to the Termination Payment.

#### 5.6 Closeout Setoffs.

Option A: After calculation of a Termination Payment in accordance with Section 5.3, if the Defaulting Party would be owed the Termination Payment, the Non-Defaulting Party shall be entitled, at its option and in its discretion, to (i) set off against such Termination Payment any amounts due and owing by the Defaulting Party to the Non-Defaulting Party under any other agreements, instruments or undertakings between the Defaulting Party and the Non-Defaulting Party and/or (ii) to the extent the Transactions are not yet liquidated in accordance with Section 5.2, withhold payment of the Termination Payment to the Defaulting Party. The remedy provided for in this Section shall be without prejudice and in addition to any right of setoff, combination of accounts, lien or other right to which any Party is at any time otherwise entitled (whether by operation of law, contract or otherwise).

Option B: After calculation of a Termination Payment in accordance with Section 5.3, if the Defaulting Party would be owed the Termination Payment, the Non-Defaulting Party shall be entitled, at its option and in its discretion, to (i) set off against such Termination Payment any amounts due and owing by the Defaulting Party or any of its Affiliates to the Non-Defaulting Party or any of its Affiliates under any other agreements, instruments or undertakings between the Defaulting Party or any of its Affiliates and the Non-Defaulting Party or any of its Affiliates and/or (ii) to the extent the Transactions are not yet liquidated in accordance with Section 5.2, withhold payment of the Termination Payment to the Defaulting Party. The remedy provided for in this Section shall be without prejudice and in addition to any right of setoff, combination of accounts, lien or other right to which any Party is at any time otherwise entitled (whether by operation of law, contract or otherwise).

Option C: Neither Option A nor B shall apply.

5.7 Suspension of Performance. Notwithstanding any other provision of this Master Agreement, if (a) an Event of Default or (b) a Potential Event of Default shall have occurred and be continuing, the Non-Defaulting Party, upon written notice to the Defaulting Party, shall have the right (i) to suspend performance under any or all Transactions; provided, however, in no event shall any such suspension continue for longer than ten (10) NERC Business Days with respect to any single Transaction unless an early Termination Date shall have been declared and notice thereof pursuant to Section 5.2 given, and (ii) to the extent an Event of Default shall have occurred and be continuing to exercise any remedy available at law or in equity.

### **ARTICLE SIX: PAYMENT AND NETTING**

6.1 Billing Period. Unless otherwise specifically agreed upon by the Parties in a Transaction, the calendar month shall be the standard period for all payments under this Agreement (other than Termination Payments and, if "Accelerated Payment of Damages" is specified by the Parties in the Cover Sheet, payments pursuant to Section 4.1 or 4.2 and Option premium payments pursuant to Section 6.7). As soon as practicable after the end of each month,

each Party will render to the other Party an invoice for the payment obligations, if any, incurred hereunder during the preceding month.

6.2 Timeliness of Payment. Unless otherwise agreed by the Parties in a Transaction, all invoices under this Master Agreement shall be due and payable in accordance with each Party's invoice instructions on or before the later of the twentieth (20th) day of each month, or tenth (10th) day after receipt of the invoice or, if such day is not a Business Day, then on the next Business Day. Each Party will make payments by electronic funds transfer, or by other mutually agreeable method(s), to the account designated by the other Party. Any amounts not paid by the due date will be deemed delinquent and will accrue interest at the Interest Rate, such interest to be calculated from and including the due date to but excluding the date the delinquent amount is paid in full.

6.3 Disputes and Adjustments of Invoices. A Party may, in good faith, dispute the correctness of any invoice or any adjustment to an invoice, rendered under this Agreement or adjust any invoice for any arithmetic or computational error within twelve (12) months of the date the invoice, or adjustment to an invoice, was rendered. In the event an invoice or portion thereof, or any other claim or adjustment arising hereunder, is disputed, payment of the undisputed portion of the invoice shall be required to be made when due, with notice of the objection given to the other Party. Any invoice dispute or invoice adjustment shall be in writing and shall state the basis for the dispute or adjustment. Payment of the disputed amount shall not be required until the dispute is resolved. Upon resolution of the dispute, any required payment shall be made within two (2) Business Days of such resolution along with interest accrued at the Interest Rate from and including the due date to but excluding the date paid. Inadvertent overpayments shall be returned upon request or deducted by the Party receiving such overpayment from subsequent payments, with interest accrued at the Interest Rate from and including the date of such overpayment to but excluding the date repaid or deducted by the Party receiving such overpayment. Any dispute with respect to an invoice is waived unless the other Party is notified in accordance with this Section 6.3 within twelve (12) months after the invoice is rendered or any specific adjustment to the invoice is made. If an invoice is not rendered within twelve (12) months after the close of the month during which performance of a Transaction occurred, the right to payment for such performance is waived.

6.4 Netting of Payments. The Parties hereby agree that they shall discharge mutual debts and payment obligations due and owing to each other on the same date pursuant to all Transactions through netting, in which case all amounts owed by each Party to the other Party for the purchase and sale of Products during the monthly billing period under this Master Agreement, including any related damages calculated pursuant to Article Four (unless one of the Parties elects to accelerate payment of such amounts as permitted by Article Four), interest, and payments or credits, shall be netted so that only the excess amount remaining due shall be paid by the Party who owes it.

6.5 Payment Obligation Absent Netting. If no mutual debts or payment obligations exist and only one Party owes a debt or obligation to the other during the monthly billing period, including, but not limited to, any related damage amounts calculated pursuant to Article Four, interest, and payments or credits, that Party shall pay such sum in full when due.



6.6 Security. Unless the Party benefiting from Performance Assurance or a guaranty notifies the other Party in writing, and except in connection with a liquidation and termination in accordance with Article Five, all amounts netted pursuant to this Article Six shall not take into account or include any Performance Assurance or guaranty which may be in effect to secure a Party's performance under this Agreement.

6.7 Payment for Options. The premium amount for the purchase of an Option shall be paid within two (2) Business Days of receipt of an invoice from the Option Seller. Upon exercise of an Option, payment for the Product underlying such Option shall be due in accordance with Section 6.1.

6.8 Transaction Netting. If the Parties enter into one or more Transactions, which in conjunction with one or more other outstanding Transactions, constitute Offsetting Transactions, then all such Offsetting Transactions may by agreement of the Parties, be netted into a single Transaction under which:

- (a) the Party obligated to deliver the greater amount of Energy will deliver the difference between the total amount it is obligated to deliver and the total amount to be delivered to it under the Offsetting Transactions, and
- (b) the Party owing the greater aggregate payment will pay the net difference owed between the Parties.

Each single Transaction resulting under this Section shall be deemed part of the single, indivisible contractual arrangement between the parties, and once such resulting Transaction occurs, outstanding obligations under the Offsetting Transactions which are satisfied by such offset shall terminate.

## ARTICLE SEVEN: LIMITATIONS

7.1 Limitation of Remedies, Liability and Damages. EXCEPT AS SET FORTH HEREIN, THERE IS NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ANY AND ALL IMPLIED WARRANTIES ARE DISCLAIMED. THE PARTIES CONFIRM THAT THE EXPRESS REMEDIES AND MEASURES OF DAMAGES PROVIDED IN THIS AGREEMENT SATISFY THE ESSENTIAL PURPOSES HEREOF. FOR BREACH OF ANY PROVISION FOR WHICH AN EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED, SUCH EXPRESS REMEDY OR MEASURE OF DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY, THE OBLIGOR'S LIABILITY SHALL BE LIMITED AS SET FORTH IN SUCH PROVISION AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED. IF NO REMEDY OR MEASURE OF DAMAGES IS EXPRESSLY PROVIDED HEREIN OR IN A TRANSACTION, THE OBLIGOR'S LIABILITY SHALL BE LIMITED TO DIRECT ACTUAL DAMAGES ONLY, SUCH DIRECT ACTUAL DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED. UNLESS EXPRESSLY HEREIN PROVIDED, NEITHER PARTY SHALL BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS OR

OTHER BUSINESS INTERRUPTION DAMAGES, BY STATUTE, IN TORT OR CONTRACT, UNDER ANY INDEMNITY PROVISION OR OTHERWISE. IT IS THE INTENT OF THE PARTIES THAT THE LIMITATIONS HEREIN IMPOSED ON REMEDIES AND THE MEASURE OF DAMAGES BE WITHOUT REGARD TO THE CAUSE OR CAUSES RELATED THERETO, INCLUDING THE NEGLIGENCE OF ANY PARTY, WHETHER SUCH NEGLIGENCE BE SOLE, JOINT OR CONCURRENT, OR ACTIVE OR PASSIVE. TO THE EXTENT ANY DAMAGES REQUIRED TO BE PAID HEREUNDER ARE LIQUIDATED, THE PARTIES ACKNOWLEDGE THAT THE DAMAGES ARE DIFFICULT OR IMPOSSIBLE TO DETERMINE, OR OTHERWISE OBTAINING AN ADEQUATE REMEDY IS INCONVENIENT AND THE DAMAGES CALCULATED HEREUNDER CONSTITUTE A REASONABLE APPROXIMATION OF THE HARM OR LOSS.

#### **ARTICLE EIGHT: CREDIT AND COLLATERAL REQUIREMENTS**

8.1 Party A Credit Protection. The applicable credit and collateral requirements shall be as specified on the Cover Sheet. If no option in Section 8.1(a) is specified on the Cover Sheet, Section 8.1(a) Option C shall apply exclusively. If none of Sections 8.1(b), 8.1(c) or 8.1(d) are specified on the Cover Sheet, Section 8.1(b) shall apply exclusively.

(a) Financial Information. Option A: If requested by Party A, Party B shall deliver (i) within 120 days following the end of each fiscal year, a copy of Party B's annual report containing audited consolidated financial statements for such fiscal year and (ii) within 60 days after the end of each of its first three fiscal quarters of each fiscal year, a copy of Party B's quarterly report containing unaudited consolidated financial statements for such fiscal quarter. In all cases the statements shall be for the most recent accounting period and prepared in accordance with generally accepted accounting principles; provided, however, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default so long as Party B diligently pursues the preparation, certification and delivery of the statements.

Option B: If requested by Party A, Party B shall deliver (i) within 120 days following the end of each fiscal year, a copy of the annual report containing audited consolidated financial statements for such fiscal year for the party(s) specified on the Cover Sheet and (ii) within 60 days after the end of each of its first three fiscal quarters of each fiscal year, a copy of quarterly report containing unaudited consolidated financial statements for such fiscal quarter for the party(s) specified on the Cover Sheet. In all cases the statements shall be for the most recent accounting period and shall be prepared in accordance with generally accepted accounting principles; provided, however, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default so long as the relevant entity diligently pursues the preparation, certification and delivery of the statements.

Option C: Party A may request from Party B the information specified in the Cover Sheet.

(b) Credit Assurances. If Party A has reasonable grounds to believe that Party B's creditworthiness or performance under this Agreement has become unsatisfactory, Party A will provide Party B with written notice requesting Performance Assurance in an amount determined by Party A in a commercially reasonable manner. Upon receipt of such notice Party B shall have three (3) Business Days to remedy the situation by providing such Performance Assurance to Party A. In the event that Party B fails to provide such Performance Assurance, or a guaranty or other credit assurance acceptable to Party A within three (3) Business Days of receipt of notice, then an Event of Default under Article Five will be deemed to have occurred and Party A will be entitled to the remedies set forth in Article Five of this Master Agreement.

(c) Collateral Threshold. If at any time and from time to time during the term of this Agreement (and notwithstanding whether an Event of Default has occurred), the Termination Payment that would be owed to Party A plus Party B's Independent Amount, if any, exceeds the Party B Collateral Threshold, then Party A, on any Business Day, may request that Party B provide Performance Assurance in an amount equal to the amount by which the Termination Payment plus Party B's Independent Amount, if any, exceeds the Party B Collateral Threshold (rounding upwards for any fractional amount to the next Party B Rounding Amount) ("Party B Performance Assurance"), less any Party B Performance Assurance already posted with Party A. Such Party B Performance Assurance shall be delivered to Party A within three (3) Business Days of the date of such request. On any Business Day (but no more frequently than weekly with respect to Letters of Credit and daily with respect to cash), Party B, at its sole cost, may request that such Party B Performance Assurance be reduced correspondingly to the amount of such excess Termination Payment plus Party B's Independent Amount, if any, (rounding upwards for any fractional amount to the next Party B Rounding Amount). In the event that Party B fails to provide Party B Performance Assurance pursuant to the terms of this Article Eight within three (3) Business Days, then an Event of Default under Article Five shall be deemed to have occurred and Party A will be entitled to the remedies set forth in Article Five of this Master Agreement.

For purposes of this Section 8.1(c), the calculation of the Termination Payment shall be calculated pursuant to Section 5.3 by Party A as if all outstanding Transactions had been liquidated, and in addition thereto, shall include all amounts owed but not yet paid by Party B to Party A, whether or not such amounts are due, for performance already provided pursuant to any and all Transactions.

(d) Downgrade Event. If at any time there shall occur a Downgrade Event in respect of Party B, then Party A may require Party B to provide Performance Assurance in an amount determined by Party A in a commercially reasonable manner. In the event Party B shall fail to provide such Performance Assurance or a guaranty or other credit assurance acceptable to Party A within three (3) Business Days of receipt of notice, then an Event of Default shall be deemed to have occurred and Party A will be entitled to the remedies set forth in Article Five of this Master Agreement.

(e) If specified on the Cover Sheet, Party B shall deliver to Party A, prior to or concurrently with the execution and delivery of this Master Agreement a guarantee in an amount not less than the Guarantee Amount specified on the Cover Sheet and in a form reasonably acceptable to Party A.

8.2 Party B Credit Protection. The applicable credit and collateral requirements shall be as specified on the Cover Sheet. If no option in Section 8.2(a) is specified on the Cover Sheet, Section 8.2(a) Option C shall apply exclusively. If none of Sections 8.2(b), 8.2(c) or 8.2(d) are specified on the Cover Sheet, Section 8.2(b) shall apply exclusively.

(a) Financial Information. Option A: If requested by Party B, Party A shall deliver (i) within 120 days following the end of each fiscal year, a copy of Party A's annual report containing audited consolidated financial statements for such fiscal year and (ii) within 60 days after the end of each of its first three fiscal quarters of each fiscal year, a copy of such Party's quarterly report containing unaudited consolidated financial statements for such fiscal quarter. In all cases the statements shall be for the most recent accounting period and prepared in accordance with generally accepted accounting principles; provided, however, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default so long as such Party diligently pursues the preparation, certification and delivery of the statements.

Option B: If requested by Party B, Party A shall deliver (i) within 120 days following the end of each fiscal year, a copy of the annual report containing audited consolidated financial statements for such fiscal year for the party(s) specified on the Cover Sheet and (ii) within 60 days after the end of each of its first three fiscal quarters of each fiscal year, a copy of quarterly report containing unaudited consolidated financial statements for such fiscal quarter for the party(s) specified on the Cover Sheet. In all cases the statements shall be for the most recent accounting period and shall be prepared in accordance with generally accepted accounting principles; provided, however, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default so long as the relevant entity diligently pursues the preparation, certification and delivery of the statements.

Option C: Party B may request from Party A the information specified in the Cover Sheet.

(b) Credit Assurances. If Party B has reasonable grounds to believe that Party A's creditworthiness or performance under this Agreement has become unsatisfactory, Party B will provide Party A with written notice requesting Performance Assurance in an amount determined by Party B in a commercially reasonable manner. Upon receipt of such notice Party A shall have three (3) Business Days to remedy the situation by providing such Performance Assurance to Party B. In the event that Party A fails to provide such Performance Assurance, or a guaranty or other credit assurance acceptable to Party B within three (3) Business Days of receipt of notice, then an Event of Default under Article Five will be deemed to have occurred and Party B will be entitled to the remedies set forth in Article Five of this Master Agreement.

(c) Collateral Threshold. If at any time and from time to time during the term of this Agreement (and notwithstanding whether an Event of Default has occurred), the Termination Payment that would be owed to Party B plus Party A's Independent Amount, if any, exceeds the Party A Collateral Threshold, then Party B, on any Business Day, may request that Party A provide Performance Assurance in an amount equal to the amount by which the Termination Payment plus Party A's Independent Amount, if any, exceeds the Party A Collateral

Threshold (rounding upwards for any fractional amount to the next Party A Rounding Amount) ("Party A Performance Assurance"), less any Party A Performance Assurance already posted with Party B. Such Party A Performance Assurance shall be delivered to Party B within three (3) Business Days of the date of such request. On any Business Day (but no more frequently than weekly with respect to Letters of Credit and daily with respect to cash), Party A, at its sole cost, may request that such Party A Performance Assurance be reduced correspondingly to the amount of such excess Termination Payment plus Party A's Independent Amount, if any, (rounding upwards for any fractional amount to the next Party A Rounding Amount). In the event that Party A fails to provide Party A Performance Assurance pursuant to the terms of this Article Eight within three (3) Business Days, then an Event of Default under Article Five shall be deemed to have occurred and Party B will be entitled to the remedies set forth in Article Five of this Master Agreement.

For purposes of this Section 8.2(c), the calculation of the Termination Payment shall be calculated pursuant to Section 5.3 by Party B as if all outstanding Transactions had been liquidated, and in addition thereto, shall include all amounts owed but not yet paid by Party A to Party B, whether or not such amounts are due, for performance already provided pursuant to any and all Transactions.

(d) Downgrade Event. If at any time there shall occur a Downgrade Event in respect of Party A, then Party B may require Party A to provide Performance Assurance in an amount determined by Party B in a commercially reasonable manner. In the event Party A shall fail to provide such Performance Assurance or a guaranty or other credit assurance acceptable to Party B within three (3) Business Days of receipt of notice, then an Event of Default shall be deemed to have occurred and Party B will be entitled to the remedies set forth in Article Five of this Master Agreement.

(e) If specified on the Cover Sheet, Party A shall deliver to Party B, prior to or concurrently with the execution and delivery of this Master Agreement a guarantee in an amount not less than the Guarantee Amount specified on the Cover Sheet and in a form reasonably acceptable to Party B.

8.3 Grant of Security Interest/Remedies. To secure its obligations under this Agreement and to the extent either or both Parties deliver Performance Assurance hereunder, each Party (a "Pledgor") hereby grants to the other Party (the "Secured Party") a present and continuing security interest in, and lien on (and right of setoff against), and assignment of, all cash collateral and cash equivalent collateral and any and all proceeds resulting therefrom or the liquidation thereof, whether now or hereafter held by, on behalf of, or for the benefit of, such Secured Party, and each Party agrees to take such action as the other Party reasonably requires in order to perfect the Secured Party's first-priority security interest in, and lien on (and right of setoff against), such collateral and any and all proceeds resulting therefrom or from the liquidation thereof. Upon or any time after the occurrence or deemed occurrence and during the continuation of an Event of Default or an Early Termination Date, the Non-Defaulting Party may do any one or more of the following: (i) exercise any of the rights and remedies of a Secured Party with respect to all Performance Assurance, including any such rights and remedies under law then in effect; (ii) exercise its rights of setoff against any and all property of the Defaulting Party in the possession of the Non-Defaulting Party or its agent; (iii) draw on any outstanding

Letter of Credit issued for its benefit; and (iv) liquidate all Performance Assurance then held by or for the benefit of the Secured Party free from any claim or right of any nature whatsoever of the Defaulting Party, including any equity or right of purchase or redemption by the Defaulting Party. The Secured Party shall apply the proceeds of the collateral realized upon the exercise of any such rights or remedies to reduce the Pledgor's obligations under the Agreement (the Pledgor remaining liable for any amounts owing to the Secured Party after such application), subject to the Secured Party's obligation to return any surplus proceeds remaining after such obligations are satisfied in full.

## ARTICLE NINE: GOVERNMENTAL CHARGES

9.1 Cooperation. Each Party shall use reasonable efforts to implement the provisions of and to administer this Master Agreement in accordance with the intent of the parties to minimize all taxes, so long as neither Party is materially adversely affected by such efforts.

9.2 Governmental Charges. Seller shall pay or cause to be paid all taxes imposed by any government authority ("Governmental Charges") on or with respect to the Product or a Transaction arising prior to the Delivery Point. Buyer shall pay or cause to be paid all Governmental Charges on or with respect to the Product or a Transaction at and from the Delivery Point (other than ad valorem, franchise or income taxes which are related to the sale of the Product and are, therefore, the responsibility of the Seller). In the event Seller is required by law or regulation to remit or pay Governmental Charges which are Buyer's responsibility hereunder, Buyer shall promptly reimburse Seller for such Governmental Charges. If Buyer is required by law or regulation to remit or pay Governmental Charges which are Seller's responsibility hereunder, Buyer may deduct the amount of any such Governmental Charges from the sums due to Seller under Article 6 of this Agreement. Nothing shall obligate or cause a Party to pay or be liable to pay any Governmental Charges for which it is exempt under the law.

## ARTICLE TEN: MISCELLANEOUS

10.1 Term of Master Agreement. The term of this Master Agreement shall commence on the Effective Date and shall remain in effect until terminated by either Party upon (thirty) 30 days' prior written notice; provided, however, that such termination shall not affect or excuse the performance of either Party under any provision of this Master Agreement that by its terms survives any such termination and, provided further, that this Master Agreement and any other documents executed and delivered hereunder shall remain in effect with respect to the Transaction(s) entered into prior to the effective date of such termination until both Parties have fulfilled all of their obligations with respect to such Transaction(s), or such Transaction(s) that have been terminated under Section 5.2 of this Agreement.

10.2 Representations and Warranties. On the Effective Date and the date of entering into each Transaction, each Party represents and warrants to the other Party that:

- (i) it is duly organized, validly existing and in good standing under the laws of the jurisdiction of its formation;

- (ii) it has all regulatory authorizations necessary for it to legally perform its obligations under this Master Agreement and each Transaction (including any Confirmation accepted in accordance with Section 2.3);
- (iii) the execution, delivery and performance of this Master Agreement and each Transaction (including any Confirmation accepted in accordance with Section 2.3) are within its powers, have been duly authorized by all necessary action and do not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any law, rule, regulation, order or the like applicable to it;
- (iv) this Master Agreement, each Transaction (including any Confirmation accepted in accordance with Section 2.3), and each other document executed and delivered in accordance with this Master Agreement constitutes its legally valid and binding obligation enforceable against it in accordance with its terms; subject to any Equitable Defenses.
- (v) it is not Bankrupt and there are no proceedings pending or being contemplated by it or, to its knowledge, threatened against it which would result in it being or becoming Bankrupt;
- (vi) there is not pending or, to its knowledge, threatened against it or any of its Affiliates any legal proceedings that could materially adversely affect its ability to perform its obligations under this Master Agreement and each Transaction (including any Confirmation accepted in accordance with Section 2.3);
- (vii) no Event of Default or Potential Event of Default with respect to it has occurred and is continuing and no such event or circumstance would occur as a result of its entering into or performing its obligations under this Master Agreement and each Transaction (including any Confirmation accepted in accordance with Section 2.3);
- (viii) it is acting for its own account, has made its own independent decision to enter into this Master Agreement and each Transaction (including any Confirmation accepted in accordance with Section 2.3) and as to whether this Master Agreement and each such Transaction (including any Confirmation accepted in accordance with Section 2.3) is appropriate or proper for it based upon its own judgment, is not relying upon the advice or recommendations of the other Party in so doing, and is capable of assessing the merits of and understanding, and understands and accepts, the terms, conditions and risks of this Master Agreement and each Transaction (including any Confirmation accepted in accordance with Section 2.3);
- (ix) it is a "forward contract merchant" within the meaning of the United States Bankruptcy Code;

- (x) it has entered into this Master Agreement and each Transaction (including any Confirmation accepted in accordance with Section 2.3) in connection with the conduct of its business and it has the capacity or ability to make or take delivery of all Products referred to in the Transaction to which it is a Party;
- (xi) with respect to each Transaction (including any Confirmation accepted in accordance with Section 2.3) involving the purchase or sale of a Product or an Option, it is a producer, processor, commercial user or merchant handling the Product, and it is entering into such Transaction for purposes related to its business as such; and
- (xii) the material economic terms of each Transaction are subject to individual negotiation by the Parties.

10.3 Title and Risk of Loss. Title to and risk of loss related to the Product shall transfer from Seller to Buyer at the Delivery Point. Seller warrants that it will deliver to Buyer the Quantity of the Product free and clear of all liens, security interests, claims and encumbrances or any interest therein or thereto by any person arising prior to the Delivery Point.

10.4 Indemnity. Each Party shall indemnify, defend and hold harmless the other Party from and against any Claims arising from or out of any event, circumstance, act or incident first occurring or existing during the period when control and title to Product is vested in such Party as provided in Section 10.3. Each Party shall indemnify, defend and hold harmless the other Party against any Governmental Charges for which such Party is responsible under Article Nine.

10.5 Assignment. Neither Party shall assign this Agreement or its rights hereunder without the prior written consent of the other Party, which consent may be withheld in the exercise of its sole discretion; provided, however, either Party may, without the consent of the other Party (and without relieving itself from liability hereunder), (i) transfer, sell, pledge, encumber or assign this Agreement or the accounts, revenues or proceeds hereof in connection with any financing or other financial arrangements, (ii) transfer or assign this Agreement to an affiliate of such Party which affiliate's creditworthiness is equal to or higher than that of such Party, or (iii) transfer or assign this Agreement to any person or entity succeeding to all or substantially all of the assets whose creditworthiness is equal to or higher than that of such Party; provided, however, that in each such case, any such assignee shall agree in writing to be bound by the terms and conditions hereof and so long as the transferring Party delivers such tax and enforceability assurance as the non-transferring Party may reasonably request.

10.6 Governing Law. THIS AGREEMENT AND THE RIGHTS AND DUTIES OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY AND CONSTRUED, ENFORCED AND PERFORMED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW. EACH PARTY WAIVES ITS RESPECTIVE RIGHT TO ANY JURY TRIAL WITH RESPECT TO ANY LITIGATION ARISING UNDER OR IN CONNECTION WITH THIS AGREEMENT.



10.7 Notices. All notices, requests, statements or payments shall be made as specified in the Cover Sheet. Notices (other than scheduling requests) shall, unless otherwise specified herein, be in writing and may be delivered by hand delivery, United States mail, overnight courier service or facsimile. Notice by facsimile or hand delivery shall be effective at the close of business on the day actually received, if received during business hours on a Business Day, and otherwise shall be effective at the close of business on the next Business Day. Notice by overnight United States mail or courier shall be effective on the next Business Day after it was sent. A Party may change its addresses by providing notice of same in accordance herewith.

10.8 General. This Master Agreement (including the exhibits, schedules and any written supplements hereto), the Party A Tariff, if any, the Party B Tariff, if any, any designated collateral, credit support or margin agreement or similar arrangement between the Parties and all Transactions (including any Confirmation accepted in accordance with Section 2.3) constitute the entire agreement between the Parties relating to the subject matter. Notwithstanding the foregoing, any collateral, credit support or margin agreement or similar arrangement between the Parties shall, upon designation by the Parties, be deemed part of this Agreement and shall be incorporated herein by reference. This Agreement shall be considered for all purposes as prepared through the joint efforts of the parties and shall not be construed against one party or the other as a result of the preparation, substitution, submission or other event of negotiation, drafting or execution hereof. Except to the extent herein provided for, no amendment or modification to this Master Agreement shall be enforceable unless reduced to writing and executed by both Parties. Each Party agrees if it seeks to amend any applicable wholesale power sales tariff during the term of this Agreement, such amendment will not in any way affect outstanding Transactions under this Agreement without the prior written consent of the other Party. Each Party further agrees that it will not assert, or defend itself, on the basis that any applicable tariff is inconsistent with this Agreement. This Agreement shall not impart any rights enforceable by any third party (other than a permitted successor or assignee bound to this Agreement). Waiver by a Party of any default by the other Party shall not be construed as a waiver of any other default. Any provision declared or rendered unlawful by any applicable court of law or regulatory agency or deemed unlawful because of a statutory change (individually or collectively, such events referred to as "Regulatory Event") will not otherwise affect the remaining lawful obligations that arise under this Agreement; and provided, further, that if a Regulatory Event occurs, the Parties shall use their best efforts to reform this Agreement in order to give effect to the original intention of the Parties. The term "including" when used in this Agreement shall be by way of example only and shall not be considered in any way to be in limitation. The headings used herein are for convenience and reference purposes only. All indemnity and audit rights shall survive the termination of this Agreement for twelve (12) months. This Agreement shall be binding on each Party's successors and permitted assigns.

10.9 Audit. Each Party has the right, at its sole expense and during normal working hours, to examine the records of the other Party to the extent reasonably necessary to verify the accuracy of any statement, charge or computation made pursuant to this Master Agreement. If requested, a Party shall provide to the other Party statements evidencing the Quantity delivered at the Delivery Point. If any such examination reveals any inaccuracy in any statement, the necessary adjustments in such statement and the payments thereof will be made promptly and shall bear interest calculated at the Interest Rate from the date the overpayment or underpayment was made until paid; provided, however, that no adjustment for any statement or payment will be

made unless objection to the accuracy thereof was made prior to the lapse of twelve (12) months from the rendition thereof, and thereafter any objection shall be deemed waived.

10.10 Forward Contract. The Parties acknowledge and agree that all Transactions constitute "forward contracts" within the meaning of the United States Bankruptcy Code.

10.11 Confidentiality. If the Parties have elected on the Cover Sheet to make this Section 10.11 applicable to this Master Agreement, neither Party shall disclose the terms or conditions of a Transaction under this Master Agreement to a third party (other than the Party's employees, lenders, counsel, accountants or advisors who have a need to know such information and have agreed to keep such terms confidential) except in order to comply with any applicable law, regulation, or any exchange, control area or independent system operator rule or in connection with any court or regulatory proceeding; provided, however, each Party shall, to the extent practicable, use reasonable efforts to prevent or limit the disclosure. The Parties shall be entitled to all remedies available at law or in equity to enforce, or seek relief in connection with, this confidentiality obligation.

**SCHEDULE M**

**(THIS SCHEDULE IS INCLUDED IF THE APPROPRIATE BOX ON THE COVER SHEET IS MARKED INDICATING A PARTY IS A GOVERNMENTAL ENTITY OR PUBLIC POWER SYSTEM)**

A. The Parties agree to add the following definitions in Article One.

“Act” means \_\_\_\_\_.<sup>1</sup>

“Governmental Entity or Public Power System” means a municipality, county, governmental board, public power authority, public utility district, joint action agency, or other similar political subdivision or public entity of the United States, one or more States or territories or any combination thereof.

“Special Fund” means a fund or account of the Governmental Entity or Public Power System set aside and or pledged to satisfy the Public Power System’s obligations hereunder out of which amounts shall be paid to satisfy all of the Public Power System’s obligations under this Master Agreement for the entire Delivery Period.

B. The following sentence shall be added to the end of the definition of “Force Majeure” in Article One.

If the Claiming Party is a Governmental Entity or Public Power System, Force Majeure does not include any action taken by the Governmental Entity or Public Power System in its governmental capacity.

C. The Parties agree to add the following representations and warranties to Section 10.2:

Further and with respect to a Party that is a Governmental Entity or Public Power System, such Governmental Entity or Public Power System represents and warrants to the other Party continuing throughout the term of this Master Agreement, with respect to this Master Agreement and each Transaction, as follows: (i) all acts necessary to the valid execution, delivery and performance of this Master Agreement, including without limitation, competitive bidding, public notice, election, referendum, prior appropriation or other required procedures has or will be taken and performed as required under the Act and the Public Power System’s ordinances, bylaws or other regulations, (ii) all persons making up the governing body of Governmental Entity or Public Power System are the duly elected or appointed incumbents in their positions and hold such

<sup>1</sup> Cite the state enabling and other relevant statutes applicable to Governmental Entity or Public Power System.

positions in good standing in accordance with the Act and other applicable law, (iii) entry into and performance of this Master Agreement by Governmental Entity or Public Power System are for a proper public purpose within the meaning of the Act and all other relevant constitutional, organic or other governing documents and applicable law, (iv) the term of this Master Agreement does not extend beyond any applicable limitation imposed by the Act or other relevant constitutional, organic or other governing documents and applicable law, (v) the Public Power System's obligations to make payments hereunder are unsubordinated obligations and such payments are (a) operating and maintenance costs (or similar designation) which enjoy first priority of payment at all times under any and all bond ordinances or indentures to which it is a party, the Act and all other relevant constitutional, organic or other governing documents and applicable law or (b) otherwise not subject to any prior claim under any and all bond ordinances or indentures to which it is a party, the Act and all other relevant constitutional, organic or other governing documents and applicable law and are available without limitation or deduction to satisfy all Governmental Entity or Public Power System' obligations hereunder and under each Transaction or (c) are to be made solely from a Special Fund, (vi) entry into and performance of this Master Agreement and each Transaction by the Governmental Entity or Public Power System will not adversely affect the exclusion from gross income for federal income tax purposes of interest on any obligation of Governmental Entity or Public Power System otherwise entitled to such exclusion, and (vii) obligations to make payments hereunder do not constitute any kind of indebtedness of Governmental Entity or Public Power System or create any kind of lien on, or security interest in, any property or revenues of Governmental Entity or Public Power System which, in either case, is proscribed by any provision of the Act or any other relevant constitutional, organic or other governing documents and applicable law, any order or judgment of any court or other agency of government applicable to it or its assets, or any contractual restriction binding on or affecting it or any of its assets.

D. The Parties agree to add the following sections to Article Three:

Section 3.4 Public Power System's Deliveries. On the Effective Date and as a condition to the obligations of the other Party under this Agreement, Governmental Entity or Public Power System shall provide the other Party hereto (i) certified copies of all ordinances, resolutions, public notices and other documents evidencing the necessary authorizations with respect to the execution, delivery and performance by Governmental Entity or Public Power System of this Master Agreement and (ii) an opinion of counsel for Governmental Entity or Public Power System, in form and substance reasonably satisfactory to the Other Party, regarding the validity, binding effect and enforceability of this Master Agreement against Governmental Entity or Public Power System in

respect of the Act and all other relevant constitutional organic or other governing documents and applicable law.

Section 3.5 No Immunity Claim. Governmental Entity or Public Power System warrants and covenants that with respect to its contractual obligations hereunder and performance thereof, it will not claim immunity on the grounds of sovereignty or similar grounds with respect to itself or its revenues or assets from (a) suit, (b) jurisdiction of court (including a court located outside the jurisdiction of its organization), (c) relief by way of injunction, order for specific performance or recovery of property, (d) attachment of assets, or (e) execution or enforcement of any judgment.

E. If the appropriate box is checked on the Cover Sheet, as an alternative to selecting one of the options under Section 8.3, the Parties agree to add the following section to Article Three:

Section 3.6 Governmental Entity or Public Power System Security. With respect to each Transaction, Governmental Entity or Public Power System shall either (i) have created and set aside a Special Fund or (ii) upon execution of this Master Agreement and prior to the commencement of each subsequent fiscal year of Governmental Entity or Public Power System during any Delivery Period, have obtained all necessary budgetary approvals and certifications for payment of all of its obligations under this Master Agreement for such fiscal year; any breach of this provision shall be deemed to have arisen during a fiscal period of Governmental Entity or Public Power System for which budgetary approval or certification of its obligations under this Master Agreement is in effect and, notwithstanding anything to the contrary in Article Four, an Early Termination Date shall automatically and without further notice occur hereunder as of such date wherein Governmental Entity or Public Power System shall be treated as the Defaulting Party. Governmental Entity or Public Power System shall have allocated to the Special Fund or its general funds a revenue base that is adequate to cover Public Power System's payment obligations hereunder throughout the entire Delivery Period.

F. If the appropriate box is checked on the Cover Sheet, the Parties agree to add the following section to Article Eight:

Section 8.4 Governmental Security. As security for payment and performance of Public Power System's obligations hereunder, Public Power System hereby pledges, sets over, assigns and grants to the other Party a security interest in all of Public Power System's right, title and interest in and to [specify collateral].

G. The Parties agree to add the following sentence at the end of Section 10.6 -  
Governing Law:

NOTWITHSTANDING THE FOREGOING, IN RESPECT OF THE  
APPLICABILITY OF THE ACT AS HEREIN PROVIDED, THE LAWS  
OF THE STATE OF \_\_\_\_\_<sup>2</sup> SHALL APPLY.

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<sup>2</sup> Insert relevant state for Governmental Entity or Public Power System.

## SCHEDULE P: PRODUCTS AND RELATED DEFINITIONS

“Ancillary Services” means any of the services identified by a Transmission Provider in its transmission tariff as “ancillary services” including, but not limited to, regulation and frequency response, energy imbalance, operating reserve-spinning and operating reserve-supplemental, as may be specified in the Transaction.

“Capacity” has the meaning specified in the Transaction.

“Energy” means three-phase, 60-cycle alternating current electric energy, expressed in megawatt hours.

“Firm (LD)” means, with respect to a Transaction, that either Party shall be relieved of its obligations to sell and deliver or purchase and receive without liability only to the extent that, and for the period during which, such performance is prevented by Force Majeure. In the absence of Force Majeure, the Party to which performance is owed shall be entitled to receive from the Party which failed to deliver/receive an amount determined pursuant to Article Four.

“Firm Transmission Contingent - Contract Path” means, with respect to a Transaction, that the performance of either Seller or Buyer (as specified in the Transaction) shall be excused, and no damages shall be payable including any amounts determined pursuant to Article Four, if the transmission for such Transaction is interrupted or curtailed and (i) such Party has provided for firm transmission with the transmission provider(s) for the Product in the case of the Seller from the generation source to the Delivery Point or in the case of the Buyer from the Delivery Point to the ultimate sink, and (ii) such interruption or curtailment is due to “force majeure” or “uncontrollable force” or a similar term as defined under the applicable transmission provider’s tariff. This contingency shall excuse performance for the duration of the interruption or curtailment notwithstanding the provisions of the definition of “Force Majeure” in Section 1.23 to the contrary.

“Firm Transmission Contingent - Delivery Point” means, with respect to a Transaction, that the performance of either Seller or Buyer (as specified in the Transaction) shall be excused, and no damages shall be payable including any amounts determined pursuant to Article Four, if the transmission to the Delivery Point (in the case of Seller) or from the Delivery Point (in the case of Buyer) for such Transaction is interrupted or curtailed and (i) such Party has provided for firm transmission with the transmission provider(s) for the Product, in the case of the Seller, to be delivered to the Delivery Point or, in the case of Buyer, to be received at the Delivery Point and (ii) such interruption or curtailment is due to “force majeure” or “uncontrollable force” or a similar term as defined under the applicable transmission provider’s tariff. This transmission contingency excuses performance for the duration of the interruption or curtailment, notwithstanding the provisions of the definition of “Force Majeure” in Section 1.23 to the contrary. Interruptions or curtailments of transmission other than the transmission either immediately to or from the Delivery Point shall not excuse performance

“Firm (No Force Majeure)” means, with respect to a Transaction, that if either Party fails to perform its obligation to sell and deliver or purchase and receive the Product, the Party to which performance is owed shall be entitled to receive from the Party which failed to perform an

amount determined pursuant to Article Four. Force Majeure shall not excuse performance of a Firm (No Force Majeure) Transaction.

“Into \_\_\_\_\_ (the “Receiving Transmission Provider”), Seller’s Daily Choice” means that, in accordance with the provisions set forth below, (1) the Product shall be scheduled and delivered to an interconnection or interface (“Interface”) either (a) on the Receiving Transmission Provider’s transmission system border or (b) within the control area of the Receiving Transmission Provider if the Product is from a source of generation in that control area, which Interface, in either case, the Receiving Transmission Provider identifies as available for delivery of the Product in or into its control area; and (2) Seller has the right on a daily prescheduled basis to designate the Interface where the Product shall be delivered. An “Into” Product shall be subject to the following provisions:

1. Prescheduling and Notification. Subject to the provisions of Section 6, not later than the prescheduling deadline of 11:00 a.m. CPT on the Business Day before the next delivery day or as otherwise agreed to by Buyer and Seller, Seller shall notify Buyer (“Seller’s Notification”) of Seller’s immediate upstream counterparty and the Interface (the “Designated Interface”) where Seller shall deliver the Product for the next delivery day, and Buyer shall notify Seller of Buyer’s immediate downstream counterparty.

2. Availability of “Firm Transmission” to Buyer at Designated Interface; “Timely Request for Transmission,” “ADI” and “Available Transmission.” In determining availability to Buyer of next-day firm transmission (“Firm Transmission”) from the Designated Interface, a “Timely Request for Transmission” shall mean a properly completed request for Firm Transmission made by Buyer in accordance with the controlling tariff procedures, which request shall be submitted to the Receiving Transmission Provider no later than 30 minutes after delivery of Seller’s Notification, provided, however, if the Receiving Transmission Provider is not accepting requests for Firm Transmission at the time of Seller’s Notification, then such request by Buyer shall be made within 30 minutes of the time when the Receiving Transmission Provider first opens thereafter for purposes of accepting requests for Firm Transmission.

Pursuant to the terms hereof, delivery of the Product may under certain circumstances be redesignated to occur at an Interface other than the Designated Interface (any such alternate designated interface, an “ADI”) either (a) on the Receiving Transmission Provider’s transmission system border or (b) within the control area of the Receiving Transmission Provider if the Product is from a source of generation in that control area, which ADI, in either case, the Receiving Transmission Provider identifies as available for delivery of the Product in or into its control area using either firm or non-firm transmission, as available on a day-ahead or hourly basis (individually or collectively referred to as “Available Transmission”) within the Receiving Transmission Provider’s transmission system.

3. Rights of Buyer and Seller Depending Upon Availability of/Timely Request for Firm Transmission.

A. Timely Request for Firm Transmission made by Buyer, Accepted by the Receiving Transmission Provider and Purchased by Buyer. If a Timely Request for Firm Transmission is made by Buyer and is accepted by the Receiving Transmission Provider



and Buyer purchases such Firm Transmission, then Seller shall deliver and Buyer shall receive the Product at the Designated Interface.

i. If the Firm Transmission purchased by Buyer within the Receiving Transmission Provider's transmission system from the Designated Interface ceases to be available to Buyer for any reason, or if Seller is unable to deliver the Product at the Designated Interface for any reason except Buyer's non-performance, then at Seller's choice from among the following, Seller shall: (a) to the extent Firm Transmission is available to Buyer from an ADI on a day-ahead basis, require Buyer to purchase such Firm Transmission from such ADI, and schedule and deliver the affected portion of the Product to such ADI on the basis of Buyer's purchase of Firm Transmission, or (b) require Buyer to purchase non-firm transmission, and schedule and deliver the affected portion of the Product on the basis of Buyer's purchase of non-firm transmission from the Designated Interface or an ADI designated by Seller, or (c) to the extent firm transmission is available on an hourly basis, require Buyer to purchase firm transmission, and schedule and deliver the affected portion of the Product on the basis of Buyer's purchase of such hourly firm transmission from the Designated Interface or an ADI designated by Seller.

ii. If the Available Transmission utilized by Buyer as required by Seller pursuant to Section 3A(i) ceases to be available to Buyer for any reason, then Seller shall again have those alternatives stated in Section 3A(i) in order to satisfy its obligations.

iii. Seller's obligation to schedule and deliver the Product at an ADI is subject to Buyer's obligation referenced in Section 4B to cooperate reasonably therewith. If Buyer and Seller cannot complete the scheduling and/or delivery at an ADI, then Buyer shall be deemed to have satisfied its receipt obligations to Seller and Seller shall be deemed to have failed its delivery obligations to Buyer, and Seller shall be liable to Buyer for amounts determined pursuant to Article Four.

iv. In each instance in which Buyer and Seller must make alternative scheduling arrangements for delivery at the Designated Interface or an ADI pursuant to Sections 3A(i) or (ii), and Firm Transmission had been purchased by both Seller and Buyer into and within the Receiving Transmission Provider's transmission system as to the scheduled delivery which could not be completed as a result of the interruption or curtailment of such Firm Transmission, Buyer and Seller shall bear their respective transmission expenses and/or associated congestion charges incurred in connection with efforts to complete delivery by such alternative scheduling and delivery arrangements. In any instance except as set forth in the immediately preceding sentence, Buyer and Seller must make alternative scheduling arrangements for delivery at the Designated Interface or an ADI under Sections 3A(i) or (ii), Seller shall be responsible for any additional transmission purchases and/or associated congestion charges incurred by Buyer in connection with such alternative scheduling arrangements.

B. Timely Request for Firm Transmission Made by Buyer but Rejected by the Receiving Transmission Provider. If Buyer's Timely Request for Firm Transmission is rejected by the Receiving Transmission Provider because of unavailability of Firm Transmission from the Designated Interface, then Buyer shall notify Seller within 15 minutes after receipt of the Receiving Transmission Provider's notice of rejection ("Buyer's Rejection Notice"). If Buyer timely notifies Seller of such unavailability of Firm Transmission from the Designated Interface, then Seller shall be obligated either (1) to the extent Firm Transmission is available to Buyer from an ADI on a day-ahead basis, to require Buyer to purchase (at Buyer's own expense) such Firm Transmission from such ADI and schedule and deliver the Product to such ADI on the basis of Buyer's purchase of Firm Transmission, and thereafter the provisions in Section 3A shall apply, or (2) to require Buyer to purchase (at Buyer's own expense) non-firm transmission, and schedule and deliver the Product on the basis of Buyer's purchase of non-firm transmission from the Designated Interface or an ADI designated by the Seller, in which case Seller shall bear the risk of interruption or curtailment of the non-firm transmission; provided, however, that if the non-firm transmission is interrupted or curtailed or if Seller is unable to deliver the Product for any reason, Seller shall have the right to schedule and deliver the Product to another ADI in order to satisfy its delivery obligations, in which case Seller shall be responsible for any additional transmission purchases and/or associated congestion charges incurred by Buyer in connection with Seller's inability to deliver the Product as originally prescheduled. If Buyer fails to timely notify Seller of the unavailability of Firm Transmission, then Buyer shall bear the risk of interruption or curtailment of transmission from the Designated Interface, and the provisions of Section 3D shall apply.

C. Timely Request for Firm Transmission Made by Buyer, Accepted by the Receiving Transmission Provider and not Purchased by Buyer. If Buyer's Timely Request for Firm Transmission is accepted by the Receiving Transmission Provider but Buyer elects to purchase non-firm transmission rather than Firm Transmission to take delivery of the Product, then Buyer shall bear the risk of interruption or curtailment of transmission from the Designated Interface. In such circumstances, if Seller's delivery is interrupted as a result of transmission relied upon by Buyer from the Designated Interface, then Seller shall be deemed to have satisfied its delivery obligations to Buyer, Buyer shall be deemed to have failed to receive the Product and Buyer shall be liable to Seller for amounts determined pursuant to Article Four.

D. No Timely Request for Firm Transmission Made by Buyer, or Buyer Fails to Timely Send Buyer's Rejection Notice. If Buyer fails to make a Timely Request for Firm Transmission or Buyer fails to timely deliver Buyer's Rejection Notice, then Buyer shall bear the risk of interruption or curtailment of transmission from the Designated Interface. In such circumstances, if Seller's delivery is interrupted as a result of transmission relied upon by Buyer from the Designated Interface, then Seller shall be deemed to have satisfied its delivery obligations to Buyer, Buyer shall be deemed to have failed to receive the Product and Buyer shall be liable to Seller for amounts determined pursuant to Article Four.

4. Transmission.

A. Seller's Responsibilities. Seller shall be responsible for transmission required to deliver the Product to the Designated Interface or ADI, as the case may be. It is expressly agreed that Seller is not required to utilize Firm Transmission for its delivery obligations hereunder, and Seller shall bear the risk of utilizing non-firm transmission. If Seller's scheduled delivery to Buyer is interrupted as a result of Buyer's attempted transmission of the Product beyond the Receiving Transmission Provider's system border, then Seller will be deemed to have satisfied its delivery obligations to Buyer, Buyer shall be deemed to have failed to receive the Product and Buyer shall be liable to Seller for damages pursuant to Article Four.

B. Buyer's Responsibilities. Buyer shall be responsible for transmission required to receive and transmit the Product at and from the Designated Interface or ADI, as the case may be, and except as specifically provided in Section 3A and 3B, shall be responsible for any costs associated with transmission therefrom. If Seller is attempting to complete the designation of an ADI as a result of Seller's rights and obligations hereunder, Buyer shall co-operate reasonably with Seller in order to effect such alternate designation.

5. Force Majeure. An "Into" Product shall be subject to the "Force Majeure" provisions in Section 1.23.

6. Multiple Parties in Delivery Chain Involving a Designated Interface. Seller and Buyer recognize that there may be multiple parties involved in the delivery and receipt of the Product at the Designated Interface or ADI to the extent that (1) Seller may be purchasing the Product from a succession of other sellers ("Other Sellers"), the first of which Other Sellers shall be causing the Product to be generated from a source ("Source Seller") and/or (2) Buyer may be selling the Product to a succession of other buyers ("Other Buyers"), the last of which Other Buyers shall be using the Product to serve its energy needs ("Sink Buyer"). Seller and Buyer further recognize that in certain Transactions neither Seller nor Buyer may originate the decision as to either (a) the original identification of the Designated Interface or ADI (which designation may be made by the Source Seller) or (b) the Timely Request for Firm Transmission or the purchase of other Available Transmission (which request may be made by the Sink Buyer). Accordingly, Seller and Buyer agree as follows:

A. If Seller is not the Source Seller, then Seller shall notify Buyer of the Designated Interface promptly after Seller is notified thereof by the Other Seller with whom Seller has a contractual relationship, but in no event may such designation of the Designated Interface be later than the prescheduling deadline pertaining to the Transaction between Buyer and Seller pursuant to Section 1.

B. If Buyer is not the Sink Buyer, then Buyer shall notify the Other Buyer with whom Buyer has a contractual relationship of the Designated Interface promptly after Seller notifies Buyer thereof, with the intent being that the party bearing actual responsibility to secure transmission shall have up to 30 minutes after receipt of the Designated Interface to submit its Timely Request for Firm Transmission.

C. Seller and Buyer each agree that any other communications or actions required to be given or made in connection with this "Into Product" (including without limitation, information relating to an ADI) shall be made or taken promptly after receipt of the relevant information from the Other Sellers and Other Buyers, as the case may be.

D. Seller and Buyer each agree that in certain Transactions time is of the essence and it may be desirable to provide necessary information to Other Sellers and Other Buyers in order to complete the scheduling and delivery of the Product. Accordingly, Seller and Buyer agree that each has the right, but not the obligation, to provide information at its own risk to Other Sellers and Other Buyers, as the case may be, in order to effect the prescheduling, scheduling and delivery of the Product

"Native Load" means the demand imposed on an electric utility or an entity by the requirements of retail customers located within a franchised service territory that the electric utility or entity has statutory obligation to serve.

"Non-Firm" means, with respect to a Transaction, that delivery or receipt of the Product may be interrupted for any reason or for no reason, without liability on the part of either Party.

"System Firm" means that the Product will be supplied from the owned or controlled generation or pre-existing purchased power assets of the system specified in the Transaction (the "System") with non-firm transmission to and from the Delivery Point, unless a different Transmission Contingency is specified in a Transaction. Seller's failure to deliver shall be excused: (i) by an event or circumstance which prevents Seller from performing its obligations, which event or circumstance was not anticipated as of the date the Transaction was agreed to, which is not within the reasonable control of, or the result of the negligence of, the Seller; (ii) by Buyer's failure to perform; (iii) to the extent necessary to preserve the integrity of, or prevent or limit any instability on, the System; (iv) to the extent the System or the control area or reliability council within which the System operates declares an emergency condition, as determined in the system's, or the control area's, or reliability council's reasonable judgment; or (v) by the interruption or curtailment of transmission to the Delivery Point or by the occurrence of any Transmission Contingency specified in a Transaction as excusing Seller's performance. Buyer's failure to receive shall be excused (i) by Force Majeure; (ii) by Seller's failure to perform, or (iii) by the interruption or curtailment of transmission from the Delivery Point or by the occurrence of any Transmission Contingency specified in a Transaction as excusing Buyer's performance. In any of such events, neither party shall be liable to the other for any damages, including any amounts determined pursuant to Article Four.

"Transmission Contingent" means, with respect to a Transaction, that the performance of either Seller or Buyer (as specified in the Transaction) shall be excused, and no damages shall be payable including any amounts determined pursuant to Article Four, if the transmission for such Transaction is unavailable or interrupted or curtailed for any reason, at any time, anywhere from the Seller's proposed generating source to the Buyer's proposed ultimate sink, regardless of whether transmission, if any, that such Party is attempting to secure and/or has purchased for the Product is firm or non-firm. If the transmission (whether firm or non-firm) that Seller or Buyer is attempting to secure is from source to sink is unavailable, this contingency excuses performance for the entire Transaction. If the transmission (whether firm or non-firm) that Seller

or Buyer has secured from source to sink is interrupted or curtailed for any reason, this contingency excuses performance for the duration of the interruption or curtailment notwithstanding the provisions of the definition of "Force Majeure" in Article 1.23 to the contrary.

"Unit Firm" means, with respect to a Transaction, that the Product subject to the Transaction is intended to be supplied from a generation asset or assets specified in the Transaction. Seller's failure to deliver under a "Unit Firm" Transaction shall be excused: (i) if the specified generation asset(s) are unavailable as a result of a Forced Outage (as defined in the NERC Generating Unit Availability Data System (GADS) Forced Outage reporting guidelines) or (ii) by an event or circumstance that affects the specified generation asset(s) so as to prevent Seller from performing its obligations, which event or circumstance was not anticipated as of the date the Transaction was agreed to, and which is not within the reasonable control of, or the result of the negligence of, the Seller or (iii) by Buyer's failure to perform. In any of such events, Seller shall not be liable to Buyer for any damages, including any amounts determined pursuant to Article Four.

MASTER POWER PURCHASE AND SALE AGREEMENT  
CONFIRMATION LETTER

This confirmation letter shall confirm the Transaction agreed to on \_\_\_\_\_, \_\_\_\_\_  
between \_\_\_\_\_ ("Party A") and \_\_\_\_\_ ("Party B")  
regarding the sale/purchase of the Product under the terms and conditions as follows:

Seller: \_\_\_\_\_

Buyer: \_\_\_\_\_

Product:

Into \_\_\_\_\_, Seller's Daily Choice

Firm (LD)

Firm (No Force Majeure)

System Firm

(Specify System: \_\_\_\_\_)

Unit Firm

(Specify Unit(s): \_\_\_\_\_)

Other \_\_\_\_\_

Transmission Contingency (If not marked, no transmission contingency)

FT-Contract Path Contingency       Seller       Buyer

FT-Delivery Point Contingency       Seller       Buyer

Transmission Contingent       Seller       Buyer

Other transmission contingency

(Specify: \_\_\_\_\_)

Contract Quantity: \_\_\_\_\_

Delivery Point: \_\_\_\_\_

Contract Price:

Energy Price: \_\_\_\_\_

Other Charges: \_\_\_\_\_

Delivery Period: \_\_\_\_\_  
Special Conditions: \_\_\_\_\_  
Scheduling: \_\_\_\_\_  
Option Buyer: \_\_\_\_\_  
Option Seller: \_\_\_\_\_  
Type of Option: \_\_\_\_\_  
Strike Price: \_\_\_\_\_  
Premium: \_\_\_\_\_  
Exercise Period: \_\_\_\_\_

This confirmation letter is being provided pursuant to and in accordance with the Master Power Purchase and Sale Agreement dated \_\_\_\_\_ (the "Master Agreement") between Party A and Party B, and constitutes part of and is subject to the terms and provisions of such Master Agreement. Terms used but not defined herein shall have the meanings ascribed to them in the Master Agreement.

[Party A]

[Party B]

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Phone No: \_\_\_\_\_

Phone No: \_\_\_\_\_

Fax: \_\_\_\_\_

Fax: \_\_\_\_\_





**Wong, Linda (BOS)**

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**From:** Paige Miller <apaige.miller@gmail.com>  
**Sent:** Thursday, December 07, 2017 2:07 PM  
**To:** Tang, Katy (BOS); Wong, Linda (BOS); Cohen, Malia (BOS); Yee, Norman (BOS); Young, Victor  
**Cc:** Scarpulla, John (PUC); Zhu, Tracy (PUC)  
**Subject:** Comment regarding File #171172

Dear Esteemed Board of Supervisors,

I am writing to you today as a resident of San Francisco and as a member of the SFPUC Citizens' Advisory Committee.

I am writing to you about the importance of approving File #171172, an ordinance that will authorize the SFPUC to execute contracts to procure the energy needed to expand CleanPowerSF citywide in 2018 and 2019.

In December 2015, the Board of Supervisors approved Ordinance 223-15, which authorized the SFPUC to enter into contracts to procure energy to launch CleanPowerSF. Since that authorization, CleanPowerSF has successfully enrolled over 82,000 customers in Districts 5 and 8. The program has an exceptionally low opt-out rate of approximately 3%.

It is now time to expand CleanPowerSF to serve the rest of the city. CleanPowerSF allows San Franciscans to procure cleaner energy at prices that are equal or lower to PG&E, saving customers money and providing significant environmental benefits. Enrolling in CleanPowerSF is the single-greatest action residents can take to support our City's climate action goals, which is why it is imperative that we expand this program citywide.

The SFPUC's Commission and CAC have adopted a shared goal of completing CleanPowerSF enrollment of the entire city by July of 2019. This timeline helps to meet the City's ambitious and important goals of reducing our carbon footprint and greenhouse gas emissions. The first step that the SFPUC must take towards reaching this goal is procuring the energy needed to support the expansion of CleanPowerSF.

To take this first step towards citywide enrollment, the ordinance that is up for your consideration under File #171172 must be approved. This ordinance will allow the SFPUC to take the same successful approach the agency took to launch the CleanPowerSF program.

The authorization provided by the ordinance is critical due to the unique nature of the energy services commodity market. The energy market is unique in that the prices of energy are constantly fluctuating throughout the day, and can change by the hour. The market, unfortunately, does not allow for prospective buyers to lock-in a price for energy, and then come back weeks later to execute the contract. The market requires that contracts be executed immediately, usually within hours of the buyer and seller agreeing on the price of the energy. The SFPUC has to be nimble to compete within this increasingly competitive market, and therefore authorizing the SFPUC to execute contracts is critical.

Without this authorization, I would be very concerned about the SFPUC's ability to roll out CleanPowerSF citywide, and would question whether the City will be able to meet its ambitious greenhouse gas emission goals.

As a member of the SFPUC CAC, I respectfully ask you to support the citywide rollout of CleanPowerSF by approving File #171172.

Sincerely,

(Angela) Paige Miller  
Environmental seat, SFPUC CAC

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Paige Miller  
(805) 795-2006

**Wong, Linda (BOS)**

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**From:** Matthew Steen <msteen@conard.org>  
**Sent:** Thursday, December 07, 2017 1:20 PM  
**To:** Cohen, Malia (BOS); Tang, Katy (BOS); Yee, Norman (BOS); Kim, Jane (BOS)  
**Cc:** Wong, Linda (BOS); Young, Victor; Scarpulla, John (PUC); Zhu, Tracy (PUC);  
apaige.miller@gmail.com; Hyams, Michael (PUC); Duong, Noelle (BOS); Lee, Ivy (BOS);  
Chan, Yoyo (BOS); Low, Jen (BOS); Summers, Ashley (BOS); Wendolyn Aragon  
**Subject:** Dec 14 B and F Committee Hearing | SFPUC Energy Procurement Ordinance File #171172

Dear Supervisors,

I am writing these comments in support of File #171172 amending the CleanPowerSF Energy Procurement Ordinance (#223-15), initially adopted by BOS in 2015. As a member of the SFPUC Citizen's Advisory Committee (District 6), I am concerned that the City encourage and promote the build-out of our CCA CleanPowerSF program across all supervisorial districts over the next two fiscal years. Your approval of this Amendment is essential to enabling SFPUC to accomplish this goal.

The volatility of energy market pricing, with primary and secondary (renewable) energy sources, has made procurement of cost-effective energy contracts, that meet the increasing needs of current and future residential and commercial customers, more challenging since adoption of this Ordinance in 2015. The need for greater flexibility is tantamount for procuring least-cost and long-term contracts, permitting SFPUC more rapid turnaround with the immediate execution of contracts on bids received from ISO energy suppliers. Unfortunately, the energy commodities market has, over time, become highly dynamic with daily and hourly price fluctuations which has necessitated this Amendment in order to assure reliable sources to meet the clean energy needs of current and future customers and help attain local climate change goals in the General Plan through a reduction in greenhouse gas emissions produced by the City as a whole.

Not approving this Amendment in Committee will hamper the ability of SFPUC to be responsive to customers' desire to reduce their carbon footprint and delay a citywide roll-out of CleanPowerSF at a time when we all can clearly see the impact of climate change locally in the form of droughts, later nesting seasons for avian wildlife, increased fire risks and sea level rise. Approval of this Amendment will help SFPUC offset the cumulative negative impacts of climate change by offering current and future CleanPowerSF customers an immediate solution to personally combat these impacts with pricing equal to or less than the rates set by P.G.& E. and the CPUC.

In a sense, this Amendment to delegate authority to SFPUC to act quickly is analogous to the authority currently exercised by another city agency, SFERS, to make rapid decisions on opportunities for its portfolio of retirement investments that maximizes ROI. For the reasons above, I urge you to pass this out of Committee to the full Board for its approval.

Thank you very much for your attention and support in this matter.

Matthew

*Matthew Steen  
District 6 Member  
SFPUC Citizen's Advisory Committee  
Member, CAC Water Committee*

December 7<sup>th</sup>, 2017

Dear Esteemed Board of Supervisors,

As a member of the San Francisco Public Utilities Commission's (SFPUC) Citizens' Advisory Committee (CAC), and Power Subcommittee Chair I am writing you today about the importance of approving File #171172, an ordinance that will authorize the SFPUC to execute contracts to procure the electricity needed to expand the CleanPowerSF program citywide.

In December 2015, the Board of Supervisors approved Ordinance 223-15, which authorized the SFPUC to enter into contracts to procure the electricity needed to launch the CleanPowerSF. Since this authorization, the program has successfully enrolled over 82,000 San Franciscans in Districts 5 and 8 and has a low opt-out rate of approximately 3%. Now is the time to build upon the program's early success and expand CleanPowerSF Citywide so all San Franciscans can procure cleaner energy, at prices that are equal or lower to PG&E, save money on their electricity bills and support the City's Climate Action goal of procuring a 100% renewable energy electricity by 2030.

The SFPUC's Commission and CAC have adopted the shared goal of completing CleanPowerSF enrollment of the entire City by July of 2019. To achieve this ambitious goal I ask for your support and approval of the ordinance up for your consideration under File #171172. The ordinance authorization is critical due to the unique nature of the electricity market in which electricity prices dynamically fluctuate throughout the day and contracts are required to be executed immediately, usually within hours of the buyer and seller agreeing on the price of the electricity. The SFPUC has to be nimble to compete within this increasingly competitive market, and therefore the authorization of File #171172 is critical to the future success of the CleanPower SF program.

Without this authorization, I worry that the SFPUC will not be able to achieve its ambitious citywide rollout of the CleanPowerSF program limiting San Franciscans choice of electricity and slowing the city's progress on its greenhouse gas emission goals.

I, Nathaniel Kinsey, respectfully ask the esteemed Board of Supervisors to support the citywide rollout of CleanPowerSF by approving File #171172.

Sincerely,



Nathaniel J Kinsey  
Large Water User – Mayoral Appointment  
SFPUC CAC Power Subcommittee Chair

**Wong, Linda (BOS)**

---

**From:** Zhu, Tracy <TZhu@sfgwater.org>  
**Sent:** Thursday, December 07, 2017 11:21 AM  
**To:** Wong, Linda (BOS); Young, Victor  
**Cc:** 'Kinsey, Nathaniel'; Scarpulla, John (PUC)  
**Subject:** FW: Request for Sign-ons for Letter of Support: CleanPowerSF Energy Procurement Ordinance  
**Attachments:** CleanPowerSF CAC Letter.signed.pdf

Hi Linda,

Please see the attached letter for inclusion in the Budget and Finance Committee packet for the December 13 meeting for the agenda item related to the File #171172.

Thank you,

Tracy Zhu  
Stakeholder and Advisory Body Analyst  
External Affairs Bureau, SFPUC  
Direct: 415.554.1816 | tzhu@sfgwater.org



**Wong, Linda (BOS)**

---

**From:** wendolyn aragon <wendolyn.aragon@gmail.com>  
**Sent:** Thursday, December 07, 2017 11:05 AM  
**To:** Fewer, Sandra (BOS); Cohen, Malia (BOS); Tang, Katy (BOS); Wong, Linda (BOS); Young, Victor  
**Cc:** Scarpulla, John (PUC); Zhu, Tracy (PUC)  
**Subject:** Support for Clean Power SF  
**Attachments:** CleanPowerSF Letter of Support.pdf

Good Morning Supervisors,

Please see the attached letter in support of expanding CleanPower SF citywide.

The San Francisco Public Utilities Commission Citizens Advisory Committee has been an unwavering supporter of CPSF, even when the program's future was uncertain. We believe that it's long overdue that we work together to eliminate dirty energy across the entire city, especially if it's an affordable option for our residents.

Thank you,  
Wendy Aragon SFPUC CAC Chair  
Representing District 1

Date

Dear Esteemed Board of Supervisors,

As members of the San Francisco Public Utilities Commission's (SFPUC) Citizens' Advisory Committee (CAC), I am writing to you today about the importance of approving File #171172, an ordinance that will authorize the SFPUC to execute contracts to procure the energy needed to expand CleanPowerSF citywide in 2018 and 2019.

In December 2015, the Board of Supervisors approved Ordinance 223-15, which authorized the SFPUC to enter into contracts to procure energy to launch CleanPowerSF. Since that authorization, CleanPowerSF has successfully enrolled over 82,000 customers in Districts 5 and 8. The program has an exceptionally low opt-out rate of approximately 3%. It is now time to expand CleanPowerSF to serve the rest of the City. CleanPowerSF allows San Franciscans to procure cleaner energy at prices that are equal or lower to PG&E, saving customers money and providing significant environmental benefits. Enrolling in CleanPowerSF is the single-greatest action residents can take to support our City's climate action goals, which is why it is imperative that we expand this program citywide.

The SFPUC's Commission and CAC have adopted a shared goal of completing CleanPowerSF enrollment of the entire City by July of 2019. This timeline helps to meet the City's ambitious and important goals of reducing our carbon footprint and greenhouse gas emissions. The first step that the SFPUC must take towards reaching this goal is procuring the energy needed to support the expansion of CleanPowerSF.

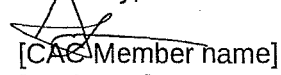
To take this first step towards Citywide enrollment, the ordinance that is up for your consideration under File #171172 must be approved. This ordinance will allow the SFPUC to take the same successful approach the agency took to launch the CleanPowerSF program.

The authorization provided by the ordinance is critical due to the unique nature of the energy services commodity market. The energy market is unique in that the prices of energy are constantly fluctuating throughout the day, and can change by the hour. The market, unfortunately, does not allow for prospective buyers to lock-in a price for energy, and then come back weeks later to execute the contract. The market requires that contracts be executed immediately, usually within hours of the buyer and seller agreeing on the price of the energy. The SFPUC has to be nimble to compete within this increasingly competitive market, and therefore authorizing the SFPUC to execute contracts is critical.

Without this authorization, I have serious concerns about the SFPUC's ability to rollout CleanPowerSF citywide, and I question if the City will be able to meet its ambitious greenhouse gas emission goals.

I respectfully ask the esteemed Board of Supervisors to support the citywide rollout of CleanPowerSF by approving File #171172.

Sincerely,

  
[CAC Member name] Amy Zock  
[CAC seat] District 4 Representative  
[Organizational affiliations]

December 7, 2017

Dear Esteemed Board of Supervisors,

As members of the San Francisco Public Utilities Commission's (SFPUC) Citizens' Advisory Committee (CAC), we are writing to you today about the importance of approving File #171172, an ordinance that will authorize the SFPUC to execute contracts to procure the energy needed to expand CleanPowerSF citywide in 2018 and 2019.

In December 2015, the Board of Supervisors approved Ordinance 223-15, which authorized the SFPUC to enter into contracts to procure energy to launch CleanPowerSF. Since that authorization, CleanPowerSF has successfully enrolled over 82,000 customers in Districts 5 and 8. The program has an exceptionally low opt-out rate of approximately 3%. It is now time to expand CleanPowerSF to serve the rest of the City. CleanPowerSF allows San Franciscans to procure cleaner energy at prices that are equal or lower to PG&E, saving customers money and providing significant environmental benefits. Enrolling in CleanPowerSF is the single-greatest action residents can take to support our City's climate action goals, which is why it is imperative that we expand this program citywide.

The SFPUC's Commission and CAC have adopted a shared goal of completing CleanPowerSF enrollment of the entire City by July of 2019. This timeline helps to meet the City's ambitious and important goals of reducing our carbon footprint and greenhouse gas emissions. The first step that the SFPUC must take towards reaching this goal is procuring the energy needed to support the expansion of CleanPowerSF.

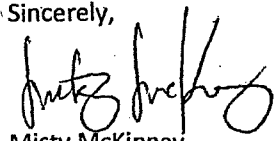
To take this first step towards Citywide enrollment, the ordinance that is up for your consideration under File #171172 must be approved. This ordinance will allow the SFPUC to take the same successful approach the agency took to launch the CleanPowerSF program.

The authorization provided by the ordinance is critical due to the unique nature of the energy services commodity market. The energy market is unique in that the prices of energy are constantly fluctuating throughout the day, and can change by the hour. The market, unfortunately, does not allow for prospective buyers to lock-in a price for energy, and then come back weeks later to execute the contract. The market requires that contracts be executed immediately, usually within hours of the buyer and seller agreeing on the price of the energy. The SFPUC has to be nimble to compete within this increasingly competitive market, and therefore authorizing the SFPUC to execute contracts is critical.

Without this authorization, we have serious concerns about the SFPUC's ability to rollout CleanPowerSF citywide, and we question if the City will be able to meet its ambitious greenhouse gas emission goals.

We, the members of the SFPUC CAC, respectfully ask the esteemed Board of Supervisors to support the citywide rollout of CleanPowerSF by approving File #171172.

Sincerely,



Misty McKinney

CAC Environmental Justice Seat



December 7, 2017

Dear Esteemed Board of Supervisors,

As members of the San Francisco Public Utilities Commission's (SFPUC) Citizens' Advisory Committee (CAC), we are writing to you today about the importance of approving File #171172, an ordinance that will authorize the SFPUC to execute contracts to procure the energy needed to expand CleanPowerSF citywide in 2018 and 2019.

In December 2015, the Board of Supervisors approved Ordinance 223-15, which authorized the SFPUC to enter into contracts to procure energy to launch CleanPowerSF. Since that authorization, CleanPowerSF has successfully enrolled over 82,000 customers in Districts 5 and 8. The program has an exceptionally low opt-out rate of approximately 3%. It is now time to expand CleanPowerSF to serve the rest of the City. CleanPowerSF allows San Franciscans to procure cleaner energy at prices that are equal or lower to PG&E, saving customers money and providing significant environmental benefits. Enrolling in CleanPowerSF is the single-greatest action residents can take to support our City's climate action goals, which is why it is imperative that we expand this program citywide.

The SFPUC's Commission and CAC have adopted a shared goal of completing CleanPowerSF enrollment of the entire City by July of 2019. This timeline helps to meet the City's ambitious and important goals of reducing our carbon footprint and greenhouse gas emissions. The first step that the SFPUC must take towards reaching this goal is procuring the energy needed to support the expansion of CleanPowerSF.

To take this first step towards Citywide enrollment, the ordinance that is up for your consideration under File #171172 must be approved. This ordinance will allow the SFPUC to take the same successful approach the agency took to launch the CleanPowerSF program.

The authorization provided by the ordinance is critical due to the unique nature of the energy services commodity market. The energy market is unique in that the prices of energy are constantly fluctuating throughout the day, and can change by the hour. The market, unfortunately, does not allow for prospective buyers to lock-in a price for energy, and then come back weeks later to execute the contract. The market requires that contracts be executed immediately, usually within hours of the buyer and seller agreeing on the price of the energy. The SFPUC has to be nimble to compete within this increasingly competitive market, and therefore authorizing the SFPUC to execute contracts is critical.

Without this authorization, we have serious concerns about the SFPUC's ability to rollout CleanPowerSF citywide, and we question if the City will be able to meet its ambitious greenhouse gas emission goals.

We, the members of the SFPUC CAC, respectfully ask the esteemed Board of Supervisors to support the citywide rollout of CleanPowerSF by approving File #171172.

Sincerely,

Wendy Aragon  
SFPUC CAC Chair  
Representing District 1

**Wong, Linda (BOS)**

---

**From:** Anietie SFPUC CAC <anietiesfpuccac@gmail.com>  
**Sent:** Thursday, December 07, 2017 10:28 AM  
**To:** Cohen, Malia (BOS); Tang, Katy (BOS); Yee, Norman (BOS)  
**Cc:** Wong, Linda (BOS); Young, Victor; Scarpulla, John (PUC); Zhu, Tracy (PUC)  
**Subject:** I am in support of the CleanPowerSF Energy Procurement Ordinance  
**Attachments:** AE-CleanPowerSF CAC Letter.pdf

Dear Supervisors,

I am enclosing a letter in support of the CleanPowerSF Energy Procurement Ordinance.

Please consider it in your deliberations.

Regards,

Anietie Ekanem

SFPUC CAC District 10 representative



December 7, 2017

Dear Esteemed Board of Supervisors,

As members of the San Francisco Public Utilities Commission's (SFPUC) Citizens' Advisory Committee (CAC), I am writing to you today about the importance of approving File #171172, an ordinance that will authorize the SFPUC to execute contracts to procure the energy needed to expand CleanPowerSF citywide in 2018 and 2019.

In December 2015, the Board of Supervisors approved Ordinance 223-15, which authorized the SFPUC to enter into contracts to procure energy to launch CleanPowerSF. Since that authorization, CleanPowerSF has successfully enrolled over 82,000 customers in Districts 5 and 8. The program has an exceptionally low opt-out rate of approximately 3%. It is now time to expand CleanPowerSF to serve the rest of the City. CleanPowerSF allows San Franciscans to procure cleaner energy at prices that are equal or lower to PG&E, saving customers money and providing significant environmental benefits. Enrolling in CleanPowerSF is the single-greatest action residents can take to support our City's climate action goals, which is why it is imperative that we expand this program citywide.

The SFPUC's Commission and CAC have adopted a shared goal of completing CleanPowerSF enrollment of the entire City by July of 2019. This timeline helps to meet the City's ambitious and important goals of reducing our carbon footprint and greenhouse gas emissions. The first step that the SFPUC must take towards reaching this goal is procuring the energy needed to support the expansion of CleanPowerSF.

To take this first step towards Citywide enrollment, the ordinance that is up for your consideration under File #171172 must be approved. This ordinance will allow the SFPUC to take the same successful approach the agency took to launch the CleanPowerSF program.

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Without this authorization, I have serious concerns about the SFPUC's ability to rollout CleanPowerSF citywide, and I question if the City will be able to meet its ambitious greenhouse gas emission goals.

We, the members of the SFPUC CAC, respectfully ask the esteemed Board of Supervisors to support the citywide rollout of CleanPowerSF by approving File #171172

Sincerely,



Anietie Ekanem

SF PUC CAC, District 10 representative

*Organizational affiliations listed for identification purposes only and not meant as an endorsement*

**Wong, Linda (BOS)**

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**From:** Zhu, Tracy <TZhu@sflower.org>  
**Sent:** Wednesday, December 06, 2017 5:13 PM  
**To:** Wong, Linda (BOS); Young, Victor  
**Cc:** 'Tedlsf'; Scarpulla, John (PUC); Chandler, Sara (PUC); Lam, Emily (PUC)  
**Subject:** FW: SFPUC Contracting Improvements  
**Attachments:** CleanPowerSF CAC Letter\_TCL.pdf

Hi Linda,

Please see the attached letter for inclusion in the Budget and Finance Committee packet for the December 13 meeting for the agenda item related to the File #171172.

Thank you,

Tracy Zhu  
SFPUC  
415-554-1816

---

**From:** Ted Loewenberg [mailto:[tedlsf@sbcglobal.net](mailto:tedlsf@sbcglobal.net)]  
**Sent:** Wednesday, December 06, 2017 2:50 PM  
**To:** Board of Supervisors, (BOS); Zhu, Tracy  
**Subject:** SFPUC Contracting Improvements

BOS Members,

Attached is my letter urging your support to enable the SFPUC to quickly and efficiently contract for Clean Power purchases of renewable energy. Please let me know if you have any questions on this matter.

Peace,

Ted Loewenberg

CAC Member

--

[tedlsf@sbcglobal.net](mailto:tedlsf@sbcglobal.net)

"It's got to come from the heart, if you want it to work."

Dear Supervisors,

6 December 2017

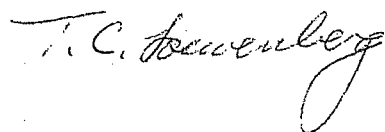
As members of the San Francisco Public Utilities Commission's (SFPUC) Citizens' Advisory Committee (CAC), I am writing to you today about the importance of approving File #171172, an ordinance that will authorize the SFPUC to swiftly execute contracts to procure the energy needed to expand CleanPowerSF citywide in 2018 and beyond.

The SFPUC is now an enterprise, in a market where competition is fierce and buying and selling of energy is done very rapidly. The agency cannot be successful (and hence, CleanPowerSF will fail) if it is restricted from consummating purchases of renewable energy by a Byzantine, slow-paced contracting process. It needs the ability "to strike while the iron is hot" to obtain the best prices for the energy it delivers to San Franciscans. Thus, passage of item 171172 is critical to the success of the efforts the Board of Supervisors fought so hard and long to secure in CleanPowerSF.

The price of failure to act on this measure is not only an embarrassment of the SFPUC and the Board of Supervisors, but it is also felt by city residents from still more carbon emissions and global warming. Surely, you would not want to see that happen. Your support is essential to the success of CleanPowerSF.

As a member of the SFPUC CAC, I respectfully ask YOU to support the citywide rollout of CleanPowerSF by approving File #171172.

Sincerely,



District 5 Representative  
Citizens Advisory Committee to the SF PUC



# San Francisco Water Power Sewer

Services of the San Francisco Public Utilities Commission

525 Golden Gate Avenue, 13th Floor  
San Francisco, CA 94102  
T 415.554.3155  
F 415.554.3161  
TTY 415.554.3487

**TO:** Angela Calvillo, Clerk of the Board  
**FROM:** John Scarpulla, SFPUC Policy and Government Affairs *JS*  
**DATE:** November 6, 2017  
**SUBJECT:** Authorizing Agreements for the Purchase of Electricity and Related Products and Services for CleanPowerSF - Public Utilities Commission

Attached please find an original and one copy of a proposed ordinance delegating authority under Charter Section 9.118 to the General Manager of the Public Utilities Commission to enter into agreements with terms in excess of ten years or requiring expenditures of \$10,000,000 or more for power and related products and services required to supply San Francisco's community choice aggregation program, CleanPowerSF, subject to specified conditions; and authorizing deviations from certain otherwise applicable contract requirements in the Administrative Code and the Environment Code.

The following is a list of accompanying documents (2 sets):

1. Board of Supervisors Ordinance
2. Legislative Digest
3. CleanPowerSF Growth Plan – May 2017
4. Request for Proposals - 2017 Bank Credit Facility for CleanPowerSF
5. Request for Offers - Shaped Energy Supplies
6. Request for Offers – Renewable Energy Supplies
7. Renewable Power Purchase Agreement (Existing Facility)
8. Renewable Power Purchase Agreement (New Facility)
9. Shaped Energy Power Purchase Agreement
10. WSPP Agreement
11. EEI Agreement

RECEIVED  
BOARD OF SUPERVISORS  
SAN FRANCISCO  
2017 NOV -5 AM 10:49  
BY *JS*

Please contact John Scarpulla at 415-934-5782 if you need any additional information on these items.

- Edwin M. Lee  
Mayor
- Ike Kwon  
President
- Vince Courtney  
Vice President
- Ann Moller Caen  
Commissioner
- Francesca Vietor  
Commissioner
- Anson Moran  
Commissioner
- Harlan L. Kelly,  
General Manager

OUR MISSION: To provide our customers with high-quality, efficient and reliable water, power and sewer services in a manner that values environmental and community interests and sustains the resources entrusted to our care.



President, District 5  
BOARD of SUPERVISORS



City Hall  
1 Dr. Carlton B. Goodlett Place, Room 244  
San Francisco 94102-4689  
Tel. No. 554-7630  
Fax No. 554-7634  
TDD/TTY No. 544-5227

1305-11  
COB, Aides  
BPF Clerk  
Deputy Clerk  
Klawns  
Dep City  
RECEIVED  
BOARD OF SUPERVISORS  
2017 DEC -8 AM 9:18

London Breed

**PRESIDENTIAL ACTION**

Date: 12/7/17

To: Angela Calvillo, Clerk of the Board of Supervisors

Madam Clerk,  
Pursuant to Board Rules, I am hereby:

Waiving 30-Day Rule (Board Rule No. 3.23)

File No. 171172 Peskin  
(Primary Sponsor)

Title. Authorizing Agreements - Purchase of Electricity and Related Products and Services for CleanPowerSF - Public Utilities Commission

Transferring (Board Rule No 3.3)

File No. \_\_\_\_\_  
(Primary Sponsor)

Title. \_\_\_\_\_

From: \_\_\_\_\_ Committee

To: \_\_\_\_\_ Committee

Assigning Temporary Committee Appointment (Board Rule No. 3.1)

Supervisor \_\_\_\_\_

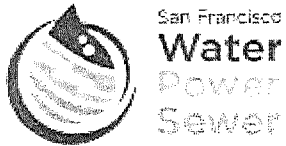
Replacing Supervisor \_\_\_\_\_

For: \_\_\_\_\_ Meeting  
(Date) (Committee)

London Breed, President  
Board of Supervisors







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# Legislation to Authorize the Purchase of Power Supplies for the —CleanPowerSF Program

Barbara Hale

Assistant General Manager for Power  
Public Utilities Commission

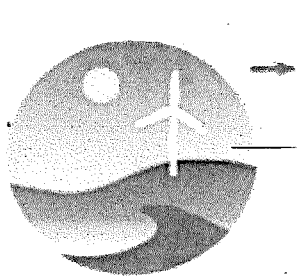
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CleanPowerSF  
*Same Service • Cleaner Energy*

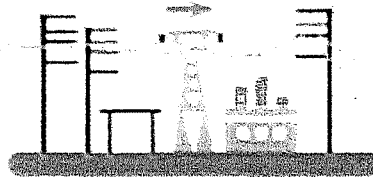


# CleanPowerSF Program

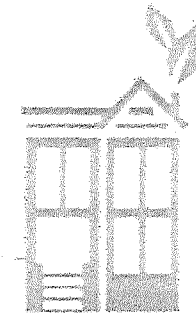
- San Francisco's Community Choice Aggregation (CCA) program adopted by the Board of Supervisors
- CCA programs authorized by CA Assembly Bill 117 (2002)
  - Allows a city or county to become the default electric supplier in its jurisdiction
- By statute, CCA is an opt-out program
  - CCA customers pay PG&E a fee to cover "stranded" costs – the PCIA



CleanPowerSF  
Water Power Sewer



PG&E TRANSFER STATION



YOUR HOME OR BUSINESS

CleanPowerSF  
Water Power Sewer



San Francisco  
**Water**  
Power  
Sewer

# CleanPowerSF Goals and Objectives



Lead with **Affordable** and  
Reliable Service



Provide **Cleaner** Electricity  
Alternatives



Invest in **Local Renewable**  
**Projects** and **Local Jobs**

*While Providing for Long-Term Rate  
and Financial Stability*

**Balanced  
Program  
Design**

Allows  
Delivery  
Across  
Competing  
Objectives  
While  
Providing  
Financial  
Stability

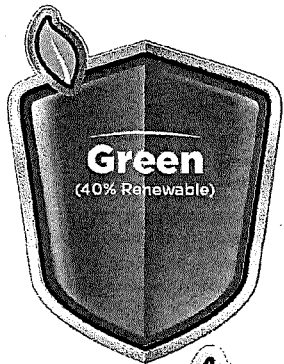
703



# Offering Two Energy Products

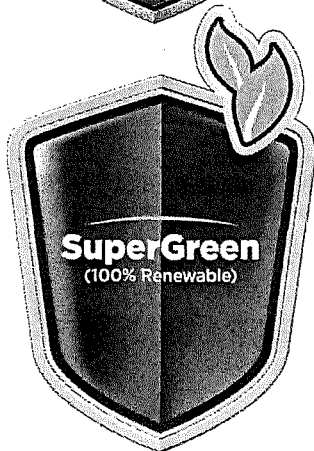
## Serving about 80,000 accounts today

- 96.8% Customer Retention Rate / Low opt-out, 3.2%
- Reduced San Francisco's GHG Footprint by estimated 22,500 metric tons of carbon dioxide



### ***Green 40% Renewable***

Fewer GHGs than PG&E at competitive rates



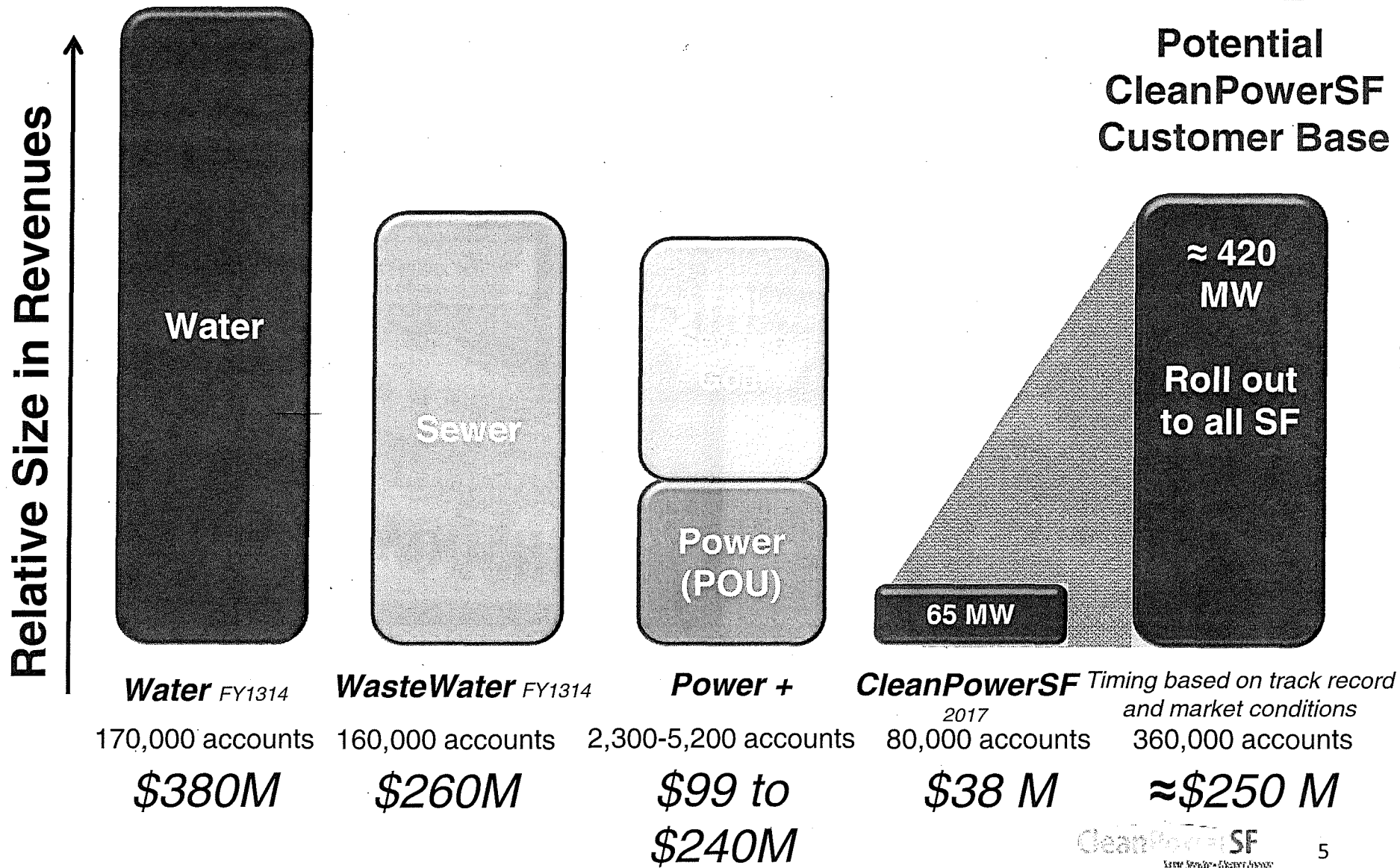
### ***SuperGreen 100% Renewable***

Optional upgrade, zero GHGs, slight rate premium

Now serving 4.0% of accounts with SuperGreen!



# Relative Scale of CleanPowerSF Revenues



705



San Francisco  
Water  
Power  
Sewer

# Preparing to Enroll the Rest of the City



706

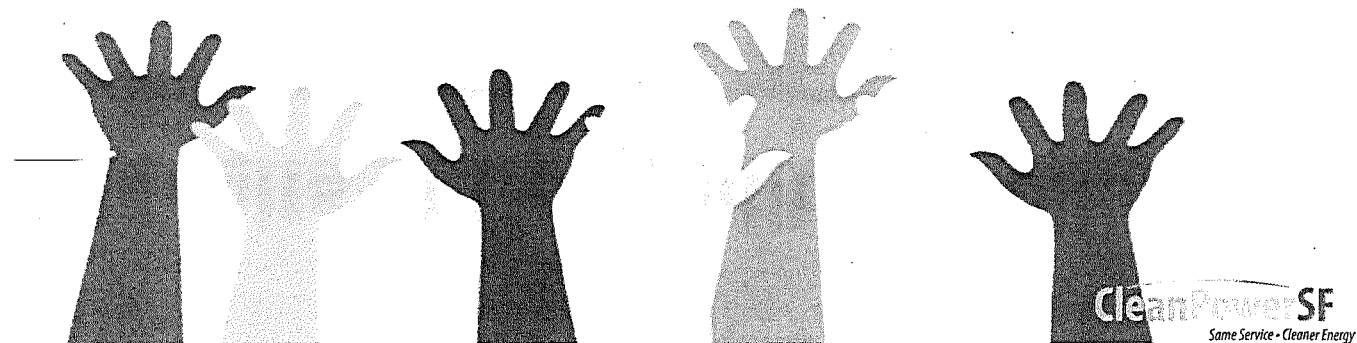


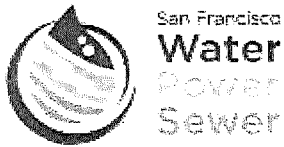
# Completing Citywide Enrollment

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- Following same process used in 2015 to launch program plus lessons learned from Growth Plan
- Purchase energy supply to serve customers
  - Issued Renewable Energy Request for Offers (RFO) on June 22<sup>nd</sup>
  - Issued Shaped Energy RFO on September 12<sup>th</sup>
- Acquire 3<sup>rd</sup> party financial support
  - Issued Bank Credit Facility RFP on July 18<sup>th</sup>

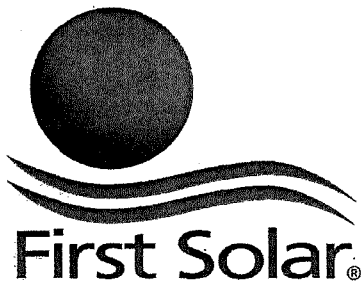
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# Results of Competitive Solicitations

- Highly competitive solicitation processes
- PUC received energy offers sufficient to serve entire city



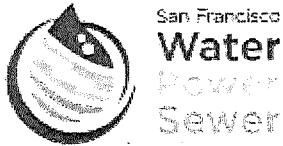




## **PUC Conditional Approval to Execute Supply Contracts (Resolution 17-0226)**

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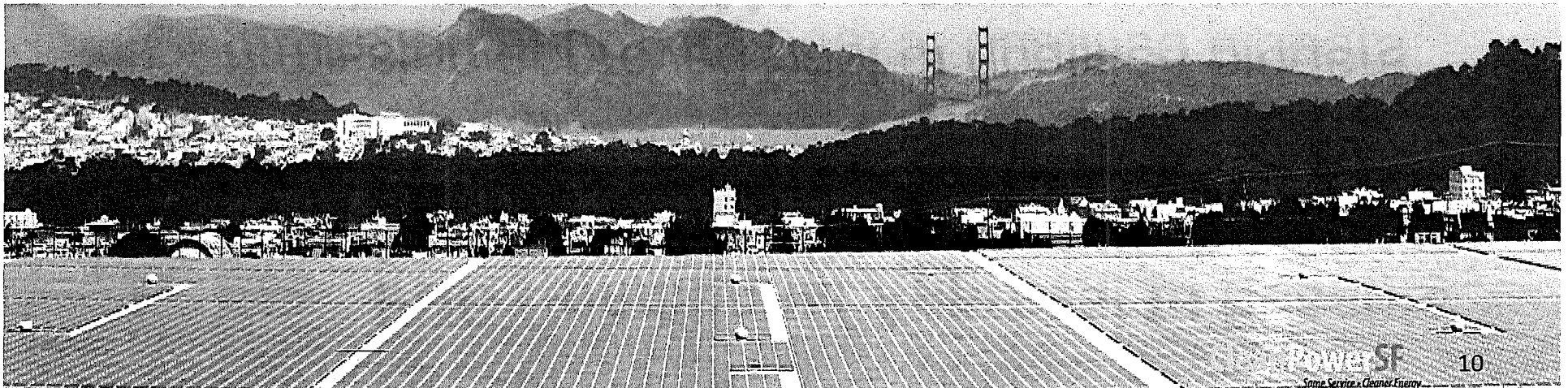
- Commission approved pool of qualified bidders and authorized the GM to execute one or more contracts subject to a number of conditions
- Bank Credit RFP to be brought to Commission on January 9<sup>th</sup>



# Board Approval

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- Following same approval process used at program launch
- Requesting Board of Supervisors provide a limited delegated authority to SFPUC to enter into supply contracts to support completion of program enrollment
- Delegated authority would include annual expenditure limitation and conditions imposed by the SFPUC on the General Manager



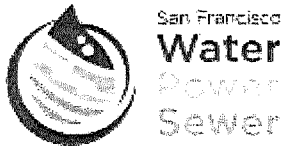


# Legislation Details

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- **Contracting Limitations in Section 7 of Ordinance**
  - City obligations under these contracts to be payable solely from CleanPowerSF revenues
  - Aggregate annual cost of energy contracts not to exceed \$175 million
  - The credit commitment under the bank agreement not to exceed \$150 million over the term of the agreement, with a maximum term of six years
  - All other conditions established by the PUC must be met
- **Proposing amendment to add PUC's approval conditions in Section 3C**

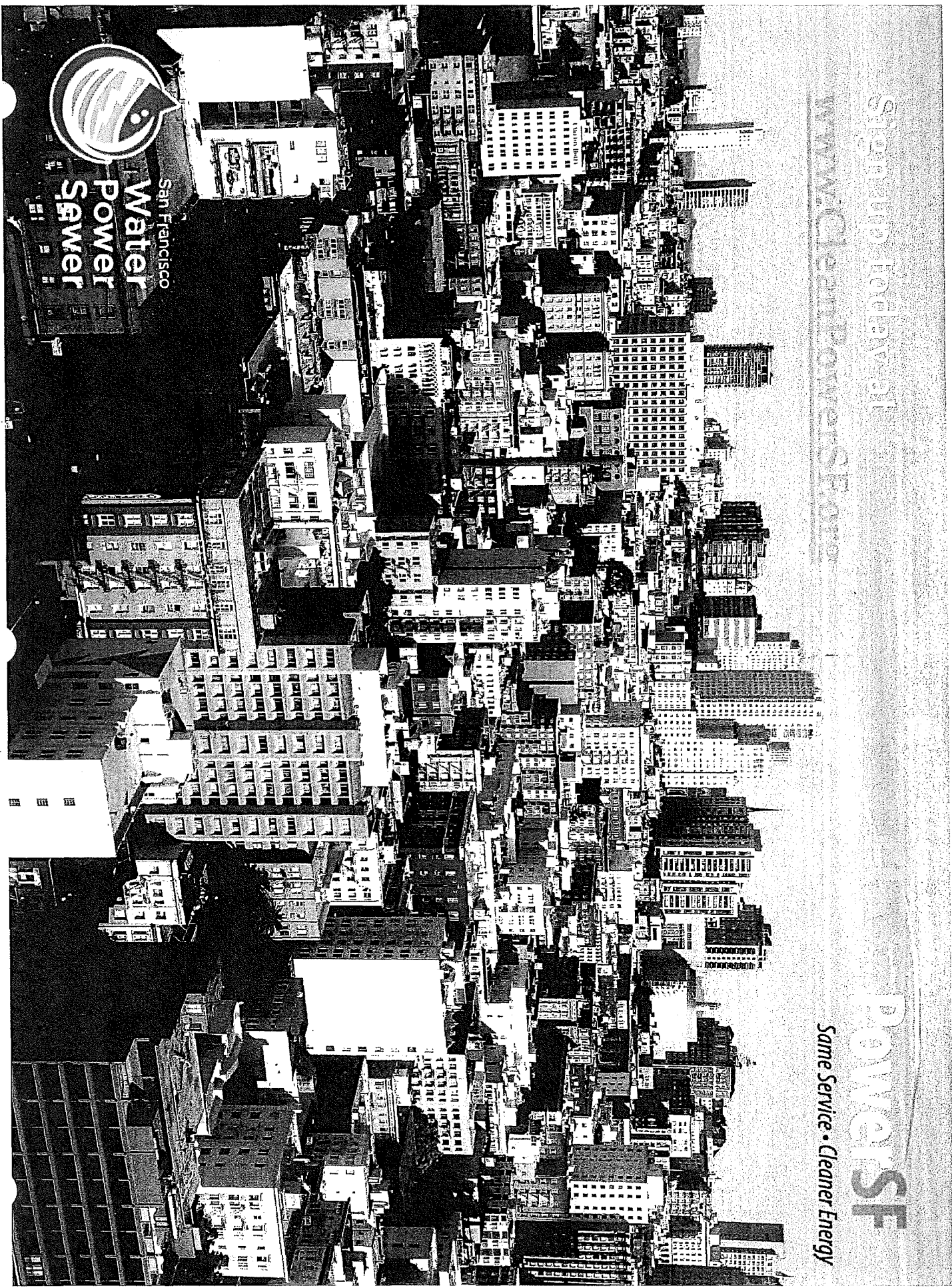
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# If Legislation is Approved, Proposed Schedule

Key Action Items	Date
Return to Commission to Demonstrate Resolution 17-0226 Conditions Will be Met	Jan. – Feb. 2018
Execute Credit and Power Contracts	Jan. – Feb. 2018
Prepare Collateral and Bring Contracts to Controller for Certification	March 2018
Commence Outreach Efforts to Customers	March – Sept. 2018
Send Enrollment Notices to Customers	May – August 2018
Begin Serving Customers	July 2018

712



San Francisco  
**Water  
Power  
Sawyer**

Sign up today at  
[www.CleanPowerSF.com](http://www.CleanPowerSF.com)

**Clean Power SF**  
Same Service • Cleaner Energy

