MASTER POWER PURCHASE AND SALE AGREEMENT CONFIRMATION LETTER

SAN FRANCISCO PUBLIC UTILITIES COMMISSION AGREEMENT NUMBER CS-1032 COMMUNITY CHOICE AGGREGATION POWER SUPPLIES **OPTION 2 – RENEWABLE ENERGY**

This confirmation letter shall confirm the Transaction agreed to on January 13, 2016 between the City and County of San Francisco, acting by and through its Public Utilities Commission, Power Enterprise ("Party A") and Shiloh I Wind Project, LLC ("Party B") regarding the sale/purchase of the Product under the terms and conditions as follows:

Seller: Party B		
Buyer: Party A		
Product: As-Available Ren	newable Energy, Green Attrib	utes, and Resource Adequacy Capacity
Facility: Shiloh I Wind		40 6 - N
Contract Quantity: 25 MW	capacity share of the Facility	as set forth in Appendix A
Delivery Point: NP 15 Tra	ding Hub (TH_NP15_GENAI	PND)
Contract Price:		
Contract Delivery Start Da	te: <u>6/1/2016</u>	
Delivery Period: From and including HE 2400 on May		E") 0100 on June 1, 2016 through and
Seller Collateral Requireme	The state of the s	Agreement § 8.1(b), Seller shall deliver Requirement in the following amounts:
	Contract Year	Amount

Buyer Collateral Requirement: Pursuant to the Master Agreement § 8.2(b), Buyer shall deliver to Seller its Collateral Requirement in the following amounts:

Contract Year	Amount

Buyer Downgrade Event Performance Assurance: Pursuant to Master Agreement Section 8.2(d), the Performance Assurance amount shall be:

This confirmation letter is executed in accordance with the Master Power Purchase and Sale Agreement dated January 13, 2016 (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.

City and County of San Francisco, acting by	Shiloh Wind Project, LLC
and through its Public Utilities Commission,	
Power Enterprise	

By: Xarl O XM By: ____

General Manager,

Harlan L. Kelly, Jr.

San Francisco Public Utilities Commission

Ву: _____

Name: _____

Title:

Contract Year	Amount				

Buyer Downgrade Event Performance Assurance: Pursuant to Master Agreement Section 8.2(d), the Performance Assurance amount shall be:

This confirmation letter is executed in accordance with the Master Power Purchase and Sale Agreement dated January 12, 2016 (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.

City and County of San Francisco, acting by
and through its Public Utilities Commission,
Power Enterprise

By: _____

Harlan J. Kelly, Jr.

General Manager, San Francisco Public Utilities Commission Shiloh Wind Project, LLC

Bv:

Name: Frank Burkhartsmeyer

Title: Authorized Representative

By:_

Name: Scott Jacobson

Title: Authorized Representative

ADDITIONAL CONFIRMATION TERMS AND CONDITIONS

- 1. Product. Seller agrees to sell and Buyer agrees to purchase Product from the Facility.
 - 1.1 The Facility. Seller represents and warrants that (i) the Facility has been certified by the CEC as an ERR that meets the requirements for the RPS, (ii) the Facility satisfies the requirements for RPS Portfolio Content Category 1, (iii) Seller has taken all necessary steps to allow the RECs generated by the Facility to be tracked in the WREGIS system prior to the first delivery to Buyer under this Transaction, and (iv) the Facility is in compliance with all applicable CAISO and WREGIS metering requirements.
 - 1.2 Green Attributes. During the Delivery Period, 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 Green Attributes, whether now existing or that come into existence in the future, associated with the Energy delivered to Buyer under this Transaction. Seller shall transfer and make such Green Attributes available to Buyer as soon as practicable upon Seller's production of the Green Attributes.
 - 1.3 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 one (1) month of creation in WREGIS 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.
 - (a) 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.
 - (b) 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.
 - (c) Due to the delay in the creation of WREGIS Certificates relative to the timing of the monthly invoice payment under the Master Agreement, Buyer shall 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.
- (d) A "WREGIS Certificate Deficit" means any deficit or shortfall in WREGIS Certificates delivered to Buyer for a calendar month as compared to the Delivered Energy for the same calendar month ("Deficient Month"), after taking into account applicable delays in the issuance of WREGIS Certificates referenced in the prior paragraph or otherwise arising under WREGIS Operating Rules. If any WREGIS Certificate Deficit is caused, or the result of any action or inaction, by Seller, then Seller shall take all actions reasonably necessary to remedy such circumstances and failure to do so shall be a breach hereunder by Seller.
- (e) 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.
- (f) If WREGIS changes the WREGIS Operating Rules after the Execution Date or applies the WREGIS Operating Rules in a manner inconsistent with this Transaction, the Parties promptly shall modify this Transaction 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 Product in the same calendar month or (ii) as may otherwise be reasonably appropriate to address such inconsistency.
- 1.4 <u>No Substitutions.</u> Seller may not substitute any component of the Product from any generating facility other than the Facility to fulfill its obligations under this Transaction, unless agreed to in writing in advance by Buyer or if Seller is providing replacement energy and RECs pursuant to 4.1(a)(iii).
- 2. Resource Adequacy. During the Delivery Period, Seller grants, pledges, assigns and otherwise commits to Buyer the Capacity and Capacity Attributes associated with the Contract Quantity, to enable Buyer to meet its Resource Adequacy obligations, including submission of a supply plan or Resource Adequacy plan as may be required. 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 and Capacity Attributes purchased by Buyer pursuant to this Transaction to meet Buyer's Resource Adequacy obligations during the Delivery Period. Seller shall be solely responsible for all costs, charges, expenses, penalties and obligations related to and arising out of compliance with laws, rules, regulations, tariffs, and orders applicable to Resource Adequacy providers.
 - 2.1 <u>Annual Reporting.</u> Seller shall report to Buyer on an annual basis, the Net Qualifying Capacity, or any successor measure of RA capacity value adopted by

the CPUC, CAISO, or any other Government Authority with jurisdiction, of the Facility and the RA Quantities committed to the Buyer, as that information becomes available from the CAISO. Buyer shall be a Load Serving Entity as designated by the CAISO and have a scheduling coordinator in the CAISO.

2.2 <u>Changes to RA Capacity Value.</u> If the RA Capacity value of the Facility is changed due to Changes in Law, the new RA capacity value of the Facility shall be apportioned to Buyer on a pro-rata basis, determined as the percentage of the Facility's total Net Qualifying Capacity committed to Buyer at the time of this Transaction.

3. Payments and Scheduling.

- 3.1 <u>Payment</u>. Seller shall provide a monthly invoice to Buyer in compliance with Section 6.1 of the Master Agreement. The invoice shall include:
 - (a) the quantities of Delivered Energy in the prior month based on CAISO metering and settlement data;
 - (b) the quantity of RA Capacity produced in the prior month;
 - (c) amounts owed to the Buyer due to the unavailability or non-use of ISTs pursuant to Section 3.6, if any.
 - (c) a calculation of the monthly payment based on the Contract Price and Quantity in accordance with section 4.1.b, below.
- 3.2 <u>Metering and Settlements Data</u>. Seller shall take all actions reasonably necessary to provide Buyer with timely read-only access to CAISO metering and settlements data through the CAISO OMAR system that is relevant to deliveries of Product to Buyer pursuant to this Confirmation.
- 3.3 <u>CAISO Settlements.</u> Notwithstanding section 6.3 of the Master Agreement, if the CAISO issues a correction to the actual quantities delivered under this Transaction at any time, the Parties agree to cooperate to adjust the affected monthly invoice in a timely manner. Any over or under payments shall be reflected in the next monthly invoice.
- 3.4 <u>Inter-SC Trades.</u> The Parties will schedule Product pursuant to this Transaction through Inter-Scheduling Coordinator trades in compliance with the CAISO Tariff. Each Party also will submit, before the applicable IST deadline, ISTs to SIBR that match the terms of the Agreement. Each Party will submit ISTs to CAISO to provide that the Delivery Point is the delivery point under the IST.
- 3.5 <u>Payment Validation</u>. Each Party shall within one business day following Transaction flow date verify that both Parties have submitted ISTs on SIBR and

that such IST has been validated by SIBR. If SIBR does not validate or accept an IST, the Parties shall within three business days of Transaction flow date meet in person or telephonically and in good faith to determine why. If CAISO does not accept an IST in a circumstance where it should according to the Tariff, both Parties will either settle the Transaction pursuant to Section 3.6 or as is otherwise appropriate to accomplish the purposes of this Agreement or jointly bring the matter to the attention of CAISO to be rectified pursuant to appropriate proceedings. If the Parties are unable to cause CAISO to rectify the matter before payment for the Transaction is due under the Agreement, they will settle the Transaction pursuant to Section 3.6 or as is otherwise appropriate to accomplish the purposes of this Amendment.

- 3.6 Settlements if IST Is Not Used or Available. If the IST process is not available due to a force majeure event, change to or suspension of the Tariff or other event, or the CAISO IST process otherwise does not function correctly, this Agreement nevertheless applies, and subject to Section 3.6, in addition to the payments due pursuant to the Agreement, Seller will pay Buyer on the due date in the Agreement for payment for the Transaction the Contract Quantity times the IST Delivery Point Price. If the IST Delivery Point Price is negative, Buyer shall pay Seller the Contract Quantity times the absolute value of the IST Delivery Point Price. If after payment is made as provided in this Section 3.1 the Transaction does become subject to the IST process, the payments made pursuant to this Section shall be refunded as appropriate to accomplish the purposes of this Amendment.
- 3.7 Scheduled and Delivered Amounts. Seller shall submit hourly ISTs at the Delivery Point based on the Contract Quantity of the CAISO Participating Intermittent Resource Protocol ("PIRP") forecast for the Facility ("Scheduled Energy"). Seller shall use good faith efforts to match the Contract Quantity of Delivered Energy with the Scheduled Energy. The Parties acknowledge that Scheduled Energy and Delivered Energy may be unequal during any period. Subject to Section 4.1.b, Buyer shall make monthly payments based upon the Delivered Energy and Seller shall be solely responsible for all costs, charges, and penalties resulting from the deviations between the Delivered Energy and the Scheduled Energy.
- 3.9 <u>Failures to Perform</u>. The provisions of this Agreement apply notwithstanding any provision in the Agreement that provides a remedy or specifies that damages are an "exclusive remedy" for an unexcused failure of a Party to schedule, purchase, sell, deliver or receive all or part of an IST-enabled Product pursuant to a Transaction. A Party's unexcused failure to perform that results in there being no IST, shall constitute a failure to deliver or receive, as applicable, and shall be addressed pursuant to the Agreement.

4. Contract Quantity. The Contract Quantity for Product and Resource Adequacy Capacity is set forth in Appendix A.

4.1 <u>Guaranteed Energy Production ("GEP").</u>

- (a) Throughout the Term of this Transaction, Seller shall deliver no less than one hundred and sixty percent (160%) of the Expected Annual Generation over two (2) consecutive Contract Years ("GEP Period") exclusive of Planned Outages, Forced Outages, curtailment for environmental protection, Curtailment Order events, Force Majeure, Buyer's failure to perform or Discretionary Curtailment ("Seller Excuse Hours"). "Expected Annual Generation" means 68,742 MWh.
 - (i) If Seller fails to meet the GEP minimum quantity, and such failure is not excused by Buyer's failure to perform or a Force Majeure event, then within sixty (60) days after the end of the GEP Period Buyer shall notify Seller of the quantity of the shortfall. Within thirty (30) days after the receipt of the shortfall, Seller shall, at Buyer's discretion either (1) pay Buyer, the positive difference obtained by subtracting the Contract Price from the Replacement Price for the Product or (2) provide, at no cost to Buyer, replacement Portfolio Content Category 1 Energy and RECs for the difference between Seller's actual deliveries during such two-year period and the 160% minimum, in the following six (6) month period.
 - (ii) The Parties agree that the damages sustained by Buyer associated with Seller's failure to achieve the GEP requirement 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 Section 4.1(a)(i) of this Confirmation to Buyer as liquidated damages.
 - (iii) Notwithstanding Section 4.1 of the Master Agreement, if the actual energy deliveries plus Seller Excuse Hours are less than seventy percent (70%) of the Contract Quantity over a six (6) month period, Buyer shall have the right to declare a default of the Agreement. Buyer shall not have the right to declare a default of the Agreement if such failure is due to lower than expected wind speeds as reasonably evidenced by Seller or if Seller is able to demonstrate to Buyer's reasonable satisfaction a legitimate reason for failure to meet the 70% minimum. Notwithstanding the foregoing, Buyer shall not have the right to declare a default if Seller provides, at no cost to Buyer, replacement Portfolio Content Category 1 Energy and RECs for the difference between

Seller's actual deliveries during such six (6) month period and the 70% minimum.

(b) Throughout the Term of this Transaction, Seller shall deliver no more than one hundred and ten percent (110%) of the Contract Quantity during a Contract Year. If at any point during the Contract Year, deliveries exceed one hundred and ten percent (110%) of the Contract Quantity for that Contract Year, Buyer may elect to buy excess quantities at the lower of fifty percent (50%) of the Contract Price or the CAISO Real-Time Market price at the Delivery Point.

4.2 Generation Forecasts.

- (a) No later than October 1st of each Contract Year, Seller will provide a non-binding 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.
- (b) No later than ten (10) days prior to each month of the Delivery Term, Seller shall provide an electronic update, in a format specified by Buyer, to the non-binding Annual Forecast for that calendar month ("Monthly Forecast"). The Monthly Forecast shall include hourly available capacity and expected generation and all Planned Outages.
- (c) No later than 6:00 am prior to each delivery day, Seller shall provide a non-binding day-ahead forecast via email of available capacity and production and any changes in Planned Outages ("Daily Forecast"). The Daily Forecast shall include hourly available capacity and generation and all Planned Outages.
- (d) No later than T-90 prior to each delivery hour, Seller shall provide an updated forecast based on the PIRP hourly forecast for such delivery hour.
- (d) In the Annual and Monthly Forecasts, Seller shall provide, at a minimum, the start and stop time of Planned Outages, the capacity out of service (kW), equipment out of service, and the reason for the Planned Outage. 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.
- 4.3 <u>Forced Outages</u>. Forced Outages shall be reported by Seller to Buyer via email within fifteen (15) minutes of such Outages. Notice by Seller to Buyer of a Forced Outage shall include the reason for the Outage (if known), expected duration of the Outage, and the capacity reduction.

- (a) Within forty-six (46) hours of a Forced Outage, a detailed verbal report shall be provided by Seller to Buyer specifying the reason for the Outage, expected duration of such Outage, capacity reduction, and actions taken to mitigate such Outage.
- (b) Within forty-six (46) hours after the Facility returns to service, Seller shall submit to Buyer a detailed written report of the Forced Outage specifying the reason for the Outage, the actual duration, capacity reduction, and actions taken to mitigate such Outage.
- (c) Seller shall notify Buyer via email immediately, and in no event later than within fifteen (15) minutes, whenever the Facility is returned to service.
- 4.4 <u>Curtailment Order.</u> Seller shall reduce Product deliveries as directed by the CAISO or the Transmission Provider in a Curtailment Order. Buyer shall not be required to pay Seller for Product that Seller could have delivered to Buyer but for such Order.

4.5 Discretionary Curtailment.

- (a) Buyer may deliver a Discretionary Curtailment notice to Seller at any time during the Term of this Transaction via telephone, provided that such Discretionary Curtailments shall be limited to a quantity of not more than ten percent (10%) of the Annual Forecast in each Contract Year. Seller shall reduce the Scheduled Energy by the amount and for the period set forth in each Discretionary Curtailment notice, effective upon the next CAISO hourly IST scheduling interval.
- (b) Buyer shall pay Seller, on the date payment would otherwise be due for the month in which a Discretionary Curtailment occurred, an amount equal to the product of (1) the amount of Delivered Energy that Seller could reasonably have delivered to Buyer but for such Discretionary Curtailment, (2) the Contract Price.
- (c) If Seller fails to comply with a Discretionary Curtailment notice, for the amount of Product (measured in MWhs) that was scheduled in contradiction to the Discretionary Curtailment notice, Seller shall pay Buyer the absolute value of CAISO's Real-Time Market price for the Delivery Point for such MWhs plus any penalties or other charges actually incurred resulting from Seller's failure to comply with the dispatch notice.

5. Additional Definitions

5.1 "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 location

specific, including any accounting construct or framework applied to any Compliance Obligations.

5.2 "Curtailment Order" means:

- the CAISO or any other entity having similar authority or performing similar functions, orders, directs, alerts, or communicates to a Party to curtail Product deliveries for reasons including, (i) any System Emergency, (ii) any warning of an anticipated System Emergency, or warning of an imminent condition or situation, which jeopardizes the CAISO's electric system integrity or the integrity of other systems to which the CAISO is connected, or (iii) any warning, forecast, or anticipated over-generation conditions, including a request from CAISO to manage over-generation conditions, provided that this subsection (a) (iii) shall not include Discretionary Curtailments;
- (b) a curtailment ordered by the Participating Transmission Owner, or any other entity having similar authority or performing similar functions, for reasons including (i) any situation that affects normal function of the electric system including any abnormal condition that requires action to prevent circumstances such as equipment damage, loss of load, or abnormal voltage conditions, or (ii) any warning, forecast or anticipation of conditions or situations that jeopardize the Participating Transmission Owner's electric system integrity or the integrity of other systems to which the Participating Transmission Owner is connected;
- (c) scheduled or unscheduled maintenance or construction on the Participating Transmission Owner's or distribution operator's transmission or distribution facilities that prevents (i) Buyer from receiving or (ii) Seller from delivering Product at the Delivery Point; or
- (d) a curtailment in accordance with Seller's obligations under its Generator Interconnection Agreement with the Participating Transmission Owner or distribution operator.
- 5.3 "Delivered Energy" means the quantity of energy actually delivered from the Facility in any period.
- 5.3 "Discretionary Curtailment" means a Buyer requirement that Seller reduce Scheduled Energy volumes under this Transaction for any reason in Buyer's sole discretion.
- 5.4 "Forced Outage" means any unplanned reduction or suspension of the electrical output from the Facility that is not a Planned Outage and not the result of Force Majeure.
- 5.5 "Guaranteed Energy Production or GEP" has the meaning set forth in Section 4.1 of this Confirmation.

- 5.6 "IST Delivery Point Price" means the LMP at the Delivery Point.
- 5.7 "LMP" or "Locational Marginal Pricing" has the meaning set forth in the CAISO Tariff.
- 5.8 "Net Qualifying Capacity" has the meaning set forth in the CAISO Tariff.
- 5.9 "Participating Transmission Owner" has the meaning set forth in the CAISO Tariff.
- 5.10 "Planned Outage" means the scheduled removal of equipment from service availability for inspection and/or maintenance, or general overhaul of one or more major equipment groups. To qualify as a Planned Outage, the activity must be reasonably necessary to reliably maintain the Facility.
- 5.11 "SIBR" means the CAISO Scheduling Infrastructure and Business Rules system.
- 5.12 "Transaction" means an agreement between the Parties under this Agreement to purchase and sell an IST-enabled Product.

Appendix A

Monthly Contract Renewable Energy Quantity (MWh)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1,356	4,520	4,108	6,399	8,175	7,570	10,220	9,850	6,755	3,242	3,082	3,465	68,742

Appendix B

2016 Monthly Contract RA Quantity (MW)* and Type

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.57	1.70	3.81	2.91	7.29	7.24	8.37	7.63	3.63	1.13	0.30	0.96
		3.81 cal, Bay-		7.29	7.24	8.37	7.63	3.63	1.13	0.30	(

^{*}RA Quantities shall be updated annually pursuant to CPUC and CAISO rules and regulations and committed to Buyer pursuant to Sections 2.1 and 2.2 of this Confirmation.