

PLANNING COORDINATOR AGREEMENT

SECOND AMENDMENT

THIS SECOND AMENDMENT (this “Second Amendment”) to the PLANNING COORDINATOR AGREEMENT by and between the California Independent System Operator Corporation (“CAISO”) and the City and County of San Francisco (“San Francisco”), acting by and through its Public Utilities Commission, is made as of _____, 2021.

RECITALS

- A. WHEREAS, CAISO and San Francisco have entered into the Planning Coordinator Agreement (as defined below); and
- B. WHEREAS, CAISO and San Francisco desire to modify the Planning Coordinator Agreement on the terms and conditions set forth herein to extend the performance period and update certain attachments to the Planning Coordinator Agreement.

NOW THEREFORE, in consideration of the mutual covenants set forth herein, THE PARTIES AGREE as follows:

- 1. Definitions.** The following definition shall apply to this Second Amendment:

Agreement. The term “Planning Coordinator Agreement” shall mean the Planning Coordinator Agreement dated May 14, 2015 between CAISO and San Francisco, as amended by the First Amendment dated July 22, 2018 and made effective November 10, 2018.

- 2. Modifications to the Agreement.** The Planning Coordinator Agreement is hereby modified as follows:

- 2a.** Section 3.1: Coordination, of the Planning Coordinator Agreement currently reads:

3.1 Coordination. The Parties agree that, for illustrative purposes only, Attachment 2 to this Agreement describes how CAISO and San Francisco anticipate coordinating with each other while carrying out their respective responsibilities as a Planning Coordinator and Transmission Planner with respect to the SF BES Facilities. San Francisco and CAISO may revise Attachment 2 by mutual written agreement. Regardless of the terms set forth in Attachment 2, the

Parties agree that they must each meet their respective responsibilities as Planning Coordinator and Transmission Planner.

Such section is hereby amended in its entirety to read as follows:

3.1 Coordination. The Parties agree that, for illustrative purposes only, Attachment 2 to this Agreement describes how CAISO and San Francisco anticipate coordinating with each other while carrying out their respective responsibilities as a Planning Coordinator and Transmission Planner with respect to the SF BES Facilities. San Francisco and CAISO shall meet and confer every three (3) years commencing from the Effective Date of the Current Term to revise Attachment 2 by mutual written agreement pursuant to Section 4.21. Regardless of the terms set forth in Attachment 2, the Parties agree that they must each meet their respective responsibilities as Planning Coordinator and Transmission Planner.

2b. Section 4.1.1: Annual Service Fee, of the Planning Coordinator Agreement currently reads:

4.1.1 Annual Service Fee. San Francisco will compensate CAISO for its services as Planning Coordinator under this Agreement by paying CAISO an annual service fee (“Annual Fee”), which will not exceed an aggregate sum of \$250,000 during the Current Term of the Agreement.

CAISO shall invoice San Francisco for the first Annual Fee within thirty (30) days of the Effective Date and shall invoice San Francisco within thirty (30) days of each anniversary to the Effective Date during the Current Term consistent with Section 4.1.3. San Francisco will pay the invoice no later than thirty (30) days after receipt thereof.

The annual service fee will be based on the number of BES transmission circuits that are owned by San Francisco and included in the CAISO’s Transmission Register multiplied by CAISO’s long-term transmission planning process (“TPP”) cost per transmission circuit. The TPP cost per transmission circuit will be based on the CAISO annual budget and Grid Management Charge Rates as amended from time to time and the total number of circuits owned by the PTOs included in the CAISO’s most current transmission plan. The calculation of the annual service fee for each year of the Current Term is set forth in Attachment 3. Subsequent annual service fees will be calculated in the same manner using data from the most recently published California ISO Grid Management Charge Update Cost of Service Study.

Such section is hereby amended in its entirety to read as follows:

4.1.1 Annual Service Fee. San Francisco will compensate CAISO for its services as Planning Coordinator under this Agreement by paying CAISO an annual service fee (“Annual Fee”), which will not exceed an aggregate sum of \$500,000 for six BES transmission circuits (as identified in CONFIDENTIAL Attachment 1) from May 14, 2015 through the Current Term. The aggregated not to exceed amount and the BES transmission circuits identified in CONFIDENTIAL Attachment 1 are subject to change if there is a change in the number of circuits included in this Agreement. The diagram in Attachment 1 is CONFIDENTIAL and relates to HHWP BES Transmission Circuits.

CAISO shall invoice San Francisco for the first Annual Fee within thirty (30) days of the Effective Date, and, thereafter, shall invoice San Francisco within thirty (30) days of each anniversary of the Effective Date during the Current Term consistent with Section 4.1.3. San Francisco will pay the invoice no later than thirty (30) days after receipt thereof.

The annual service fee will be based on the number of BES transmission circuits that are owned by San Francisco and included in the CAISO’s Transmission Register multiplied by CAISO’s long-term transmission planning process (“TPP”) cost per transmission circuit. The TPP cost per transmission circuit will be based on the data provided in the CAISO’s most recently published Cost of Service Study and the total number of BES transmission circuits owned by the PTOs included in the CAISO’s most current transmission plan. The calculation of the annual service fee is set forth in Attachment 3. Subsequent annual service fees will be calculated in the same manner. San Francisco and the CAISO will meet and confer should there be a change in the number of BES transmission circuits owned by San Francisco and, in any event, every three years commencing from the Effective Date of the Current Term to revise Attachment 3 by mutual agreement in writing pursuant to Section 4.21.

2c. Section 4.3 Effective Date of the Planning Coordinator Agreement currently reads:

4.3 Effective Date. This Agreement shall be effective on November 10, 2018 if duly executed by the Parties (“Effective Date”) and shall remain in full force and effect until November 10, 2021 (“Current Term”) or as terminated pursuant to Section 4.4 of this Agreement. Notwithstanding the foregoing, the Parties agree that the San Francisco Controller must certify the availability of funds and notify the CAISO in writing of such before the Agreement may become effective. The Parties may mutually agree in writing to extend the term of the Agreement an additional three (3) years at any time, provided that, with respect to San Francisco, such agreement must be approved in the same manner as this Agreement and must comply with all applicable San Francisco requirements.

Such section is hereby amended in its entirety to read as follows:

4.3 Effective Date. This Agreement shall be effective on November 11, 2021 if duly executed by the Parties (“Effective Date”) and shall remain in full force and effect until November 10, 2031 (“Current Term”) or as terminated pursuant to Section 4.4 of this Agreement. Notwithstanding the foregoing, the Parties agree that the San Francisco Controller must certify the availability of funds and notify the CAISO in writing of such before the Agreement may become effective. The Parties may mutually agree in writing to extend the term of the Agreement at any time pursuant to Section 4.21 of this Agreement, provided that, with respect to San Francisco, such agreement must comply with all applicable San Francisco requirements.

2d. Section 4.21 Amendments of the Planning Coordinator Agreement currently reads:

4.21 Amendments. This Agreement and the Attachments hereto may be amended from time to time by the mutual agreement of the Parties in writing, but in the case of San Francisco, such mutual written agreement must be executed and approved in the same manner as this Agreement. If FERC filing is required for this Agreement, amendments that require FERC approval shall not take effect until FERC has accepted such amendments for filing and made them effective. If FERC filing is not required for this Agreement, an amendment shall become effective in accordance with its terms.

If FERC filing is required for this Agreement, nothing contained herein shall be construed as affecting in any way the right of CAISO to unilaterally make application to FERC for a change in the rates, terms and conditions of this Agreement under Section 205 of the FPA and pursuant to FERC's rules and regulations promulgated thereunder, and San Francisco shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 206 or any other applicable provision of the FPA and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under Sections 205 or 206 of the FPA and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.

Such section is hereby amended in its entirety to read as follows:

4.21 Amendments. This Agreement and the Attachments hereto may be amended from time to time by the mutual agreement of the Parties in writing, but in the case of San Francisco, for material amendments to the Agreement such mutual written agreement must be executed and approved in the same manner as this Agreement. Modifications to the Agreement that do not result in material changes to the Parties' obligations or performance herein may be made pursuant to a letter agreement between the Parties. Subject to the "not to exceed amount" set forth in Section 4.1.1 (Annual Service Fee), Attachments 1 (Diagram), 2 (California ISO (CAISO) and City and County of San Francisco Hetch Hetchy Water and Power (HHWP) Coordination), 3 (Long Term Transmission Planning Cost of Service Calculation), and 5 (Applicable Local Rules and Ordinances) to this Agreement may be changed pursuant to a letter agreement between the Parties. If FERC filing is required for this Agreement, amendments that require FERC approval shall not take effect until FERC has accepted such amendments for filing and made them effective. If FERC filing is not required for this Agreement, an amendment shall become effective in accordance with its terms.

If FERC filing is required for this Agreement, nothing contained herein shall be construed as affecting in any way the right of CAISO to unilaterally make application to FERC for a change in the rates, terms and conditions of this Agreement under Section 205 of the FPA and pursuant to FERC's rules and regulations promulgated thereunder, and San Francisco shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 206 or any other applicable provision of the FPA and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under Sections 205 or 206 of the FPA and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.

2e. Attachment 1. Attachment 1: "Diagram" of the Planning Coordinator Agreement is replaced in its entirety by CONFIDENTIAL Attachment 1 to this Second Amendment.

2f. Attachment 2. Attachment 2: "CAISO and San Francisco Coordination" of the Planning Coordinator Agreement is replaced in its entirety by Attachment 2: "California ISO (CAISO) and City and County of San Francisco Hetch Hetchy Water and Power (HHWP) Coordination" to this Second Amendment.

2g. Attachment 3. Attachment 3: "Calculation of Annual Service Fee For 2014" of the Planning Coordinator Agreement is replaced in its entirety by

Attachment 3: “Long Term Transmission Planning Cost of Service Calculation” to this Second Amendment.

2h. Attachment 4. Attachment 4: “Notices” of the Planning Coordinator Agreement is replaced in its entirety by Attachment 4 to this Second Amendment.

3. Legal Effect. Except as expressly modified by this Second Amendment, all of the terms and conditions of the Planning Coordinator Agreement shall remain unchanged and in full force and effect. The Parties agree that the modifications contained in this Second Amendment do not require approval by FERC.

4. Counterparts. This Second Amendment may be executed in one or more counterparts at different times, each of which shall be regarded as an original and all of which, taken together, shall constitute one and the same Second Amendment.

IN WITNESS WHEREOF, the Parties hereto have caused this Second Amendment to be duly executed on behalf of each by and through their authorized representatives as of the date hereinabove written.

California Independent System Operator Corporation

By: _____

Name: _____

Title: _____

Date: _____

City and County of San Francisco

By: _____

Name: _____

Title: _____

Date: _____

Approved as to Form:

Dennis J. Herrera
City Attorney

By: _____

William K. Sanders
Deputy City Attorney

CONFIDENTIAL - Attachment 1

The following listed documents are CONFIDENTIAL and not available for public review.

- Diagram – HHWP Generating and Electric Transmission Facilities
- HHWP BES Transmission Circuits

Attachment 2¹**California ISO (CAISO) and City and County of San Francisco Hetch Hetchy Water and Power (HHWP) Coordination****1. Facility Interconnection Studies**

Applicable standard: FAC-002-3 (4/1/2021)

With respect to interconnections to HHWP facilities, HHWP will conduct interconnection studies pursuant to its facilities interconnection procedures and will provide facility interconnection information and study results to the CAISO. As appropriate, the CAISO will incorporate information from HHWP interconnection studies in its Generator Interconnection and Deliverability Allocation Procedures (“GIDAP”) and Transmission Planning Process (“TPP”) studies. HHWP and CAISO will jointly evaluate, coordinate, and cooperate on interconnection studies. This agreement does not affect either (1) interconnections to the CAISO Controlled Grid facilities which will continue to be governed by the CAISO Tariff and Business Practice Manuals (“BPMs”), or (2) HHWP’s rights and responsibilities with respect to such interconnections.

2. Transmission Planning

Applicable standards: TPL-001-; (TPL-001-5.1 has a 7/1/2023 effective date); TPL-007-4; WECC Regional Criteria TPL-001-WECC-CRT-3.2; WECC BES Inclusion Guideline.

HHWP will participate in the CAISO TPP. HHWP will submit to the CAISO the information about the HHWP system that the CAISO requires to undertake its TPP. The CAISO will undertake its TPP in accordance with its Tariff and BPMs. Consistent with its responsibility to meet Reliability Standards applicable to a Transmission Planner or Transmission Owner, HHWP has the final responsibility and authority over implementing corrective actions, modifications, or changes to its facilities.

3. SOL Methodology, SOLs, IROLs, and Stability Limits

Applicable standards: FAC-010-3, FAC-014-2

¹ The "Applicable standards" noted herein are those in effect as of the execution date of this Planning Coordinator Agreement. However, the Planning Coordinator Agreement shall automatically incorporate requirements set forth in any new applicable standards or revisions of existing applicable standards with Effective Dates during the term of this agreement.

CAISO will document and share its FAC-010-3 SOL Methodology for use in developing SOLs within its Planning Authority Area, while FAC-010 continues to be applicable to the Planning Authority (a.k.a., Planning Coordinator), including sharing its SOL Methodology with HHWP. Pursuant to FAC-014-2, HHWP will establish and provide to CAISO SOLs for the HHWP system consistent with the CAISO SOL Methodology, as applicable. CAISO will adopt SOLs for its Planning Authority Area, incorporating as appropriate the information provided by HHWP.

HHWP will provide to CAISO HHWP's list of multiple HHWP/Adjacent system contingencies (if any) which result in stability limits on the HHWP system for use by the CAISO as appropriate in carrying out its responsibilities under FAC-014-2.

4. Modeling, Data, and Analysis

Applicable standards: MOD-031-3 (4/1/2021); MOD-032-1; MOD-033-2 (4/1/2021)

MOD-031-3 Demand and Energy Data;
MOD-032-1 Data for Power System Modeling and Analysis;
MOD-033-2 Steady-State and Dynamic System Model Validation

HHWP will provide to CAISO HHWP transmission system load and modeling data pursuant to the requirements of MOD-032-1 and the WECC Data Preparation Manual and CEC data collection requirements. Information regarding MOD-032-1 will be provided in the annual base case development process. The CAISO will include this data in its documentation for its Planning Coordinator Area, and/or Balancing Authority Area, developed consistent with the NERC MOD Standards, the CAISO Tariff and BPMs, that identify the scope and details of the actual and forecast (a) Demand data, (b) Net Energy for Load data, and (c) controllable and dispatchable DSM data to be reported for system modeling data for power system modeling and reliability analyses. The CAISO will use the HHWP transmission system load and modeling data and models provided by HHWP as needed to meet its obligations under MOD-031-3, MOD-032-1, and MOD-033-2. There are no HHWP interruptible demands or DCLM load data on the HHWP system.

5. Underfrequency Load Shedding (UFLS)

Applicable standard and regional criteria: PRC-006-5 D.B. Regional Variance for the WECC (see pages 25-28 and pages 29-34 of the NERC Standard), WECC Regional Criteria PRC-006-WECC-CRT-3.1.

HHWP will participate and/or provide information as necessary for CAISO's studies related to PRC-006. HHWP will participate and/or provide information as necessary for the CAISO's activities related to PRC-006-WECC-CRT-3.1

6. Transmission Relay Loadability

Applicable standard: PRC-023-4

CAISO will include the HHWP system in its Transmission Register as non-PTO facilities and will include such facilities in its determination of assessments required under PRC-023-4, R6. Upon request, HHWP will provide facilities information needed by CAISO to perform its PRC-023-4 evaluations.

7. Additional Protection and Control Standards²

Applicable Standards: PRC-010-2 Undervoltage Load Shedding (UVLS), if applicable; PRC-012-2 Remedial Action Schemes (RAS) (1/1/2021 Effective Date), if applicable, PRC-026-1 Relay Performance During Stable Power Swings, if applicable.

Should PRC-010 become applicable to HHWP in the future, HHWP will provide any relevant information to CAISO in compliance with PRC-010-2 (UVLS).

The purpose of PRC-026-1 is to ensure that load-responsive protective relays are expected to not trip in response to stable power swings during non-Fault conditions. If, pursuant to PRC-026-1 R1 Criterion 4, the CAISO notifies HHWP of an Element identified in the most recent annual Planning Assessment where relay tripping occurs due to a stable or unstable power swing during a simulated disturbance, HHWP will perform its compliance obligations as a GO and TO subject to PRC-026-1, requirements R2-R4. If any of R1 Criterion 1 – 4 are identified by CAISO as the Planning Coordinator, the CAISO would notify HHWP. HHWP would need to perform its compliance obligations as a GO and TO subject to PRC-026-1 R2-R4.

With respect to PRC-012-2 R4, the CAISO began its R4 RAS evaluation in 2020 with applicable TO/TP input. The R4 RAS evaluation will be performed over the allowed five-year period. CAISO will provide year-end results of the RAS evaluation to each applicable TO/TP who own RAS which have been evaluated during the year. R4 allows for applicable RAS to be reviewed over a five-year period.

Should PRC-012 become applicable to HHWP in the future, CAISO as the Planning Coordinator would provide any relevant information to HHWP in compliance with PRC-012-2 (RAS) R4.

² These Standards are applicable to HHWP's Functional Registrations; however, HHWP does not currently own the related equipment or meet the required criteria. If during the term of the Planning Coordinator Agreement HHWP's status related to any of these Standards changes, the responsibilities outlined by the Standards shall be performed by CAISO and/or HHWP as applicable.

8. Interconnection Reliability Operations and Coordination

Applicable Standard: IRO-017-1 Outage Coordination Requirements R3 & R4

Pursuant to R3, the CAISO as the Planning Coordinator and HHWP as the Transmission Planner will provide their Planning Assessment(s) to RC West as the impacted Reliability Coordinator. Planning Assessments performed by the CAISO on HHWP's behalf will be provided to RC West by the CAISO.

Pursuant to R4, CAISO as the Planning Coordinator and HHWP as the Transmission Planner will jointly develop solutions with RC West as its respective Reliability Coordinator for identified issues or conflicts with planned outages in its Planning Assessment for the Near-Term Transmission Planning Horizon.

9. Nuclear

NUC-001-4 is applicable to the CAISO as a Planning Coordinator and to its Planning Coordinator Area, as the PG&E Diablo Canyon Nuclear Power Plant, located in PG&E's service area, is part of the CAISO Controlled Grid.

NUC-001-4 is not applicable to HHWP, as HHWP does not have any nuclear facilities.

10. Cyber Security Standards

CIP-002-5.1a – Cyber Security – BES Cyber System Categorization
Medium Impact Rating (M) CONFIDENTIAL Attachment 1 Criteria 2.3, 2.6, 2.9 (if applicable); and possibly:

CIP-014-2 R2 – Physical Security (only if the Planning Coordinator is requested by the Transmission Owner to be the unaffiliated third party to verify the Transmission Owner’s risk assessment performed in R1.)

Attachment 3

Long Term Transmission Planning Cost of Service Calculation



Long Term Transmission Planning Cost Calculation

Reference Documents

2019 Cost of Service Study and 2021 GMC Update

<http://www.caliso.com/Pages/documentbygroup.aspx?DocId=20200802-8446-4baa-b28f-02a8457b00>

Cost of Long Term Transmission Planning (LTPP)
(amounts in thousands)

Component	Code	Market Services	System Operations	CRR Services	Reliability Coordinator	Indirect	Amount	LTPP Factor	Allocation to LTPP	Identifier	Formula
Allocation of Direct Costs (ABC Level 2 Activities)											
<u>Develop Infrastructure</u>											
Develop & Monitor Regulatory Contract Procedures	201	95%			5%		\$ 644	0%	\$ -		
Manage Generator Interconnection Agreements (GIA)	202		100%				\$ 319	0%	-		
Manage Generator Interconnection Process (GIP)	203		100%				\$ 2,765	0%	-		
Manage Long Term Transmission Planning	204		100%				\$ 6,618	50%	3,309		
Manage Transmission and Resource Implementation	205		95%		5%		\$ 685	0%	-		
Manage Transmission Maintenance Standards	206		100%				\$ 514	0%	-		
NERC/ WECC Loads & Resources Data Requests	207		100%				\$ 247	0%	-		
Seasonal Assessment	208		100%				\$ 284	0%	-		
Manage Queue	209		100%				\$ 786	0%	-		
Manage Annual Delivery Assessment	210		100%				\$ 1	0%	-		
Total LTPP Direct Costs									\$ 3,309	(1)	= 56,618 x factor of 50%
<i>Note: Information pulled from the 2019 Cost of Service Study.</i>											
Allocation of Indirect Costs											
Total Direct Net System Operations Costs (before allocation of indirect costs)									\$ 43,934	(2)	
Percentage of LTPP costs to ABC level 2 Direct Costs									7.53%	(3)	= (1) / (2)
Total System Operations Indirect Dollars Allocated									\$ 44,116	(4)	
Total LTPP Indirect Costs									\$ 3,323	(5)	= (3) * (4)
Total Long Term Transmission Planning Costs									\$ 6,632	(6)	= (1) + (5)
Annual Planning Coordinator Service Charge Calculation											
Total number of transmission circuits in ISO 2019 Transmission Plan									1,571	(7)	
LTPP cost per transmission circuit in ISO 2019 Transmission Plan									\$ 4.22	(8)	= (6) / (7)
Total number of transmission circuits in HHWP's system									6	(9)	
Annual Planning Coordinator Service Charge (\$ in 1000s)									\$ 25.328	(10)	= (8) * (9)

Attachment 4

Notices

1. As to the CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION:

Regulatory Contracts
250 Outcropping Way
Folsom, CA 95630
Telephone: (916) 351-4400
Electronic mail: RegulatoryContracts@caiso.com

Attn: Accounting
250 Outcropping Way
Folsom, CA 95630

Bank Wiring Instructions:
By Wire: Wells Fargo Bank, N.A.
ABA Routing #: 121000248
Account # 4122041783

2. As to the CITY AND COUNTY OF SAN FRANCISCO:

Margaret Hannaford
Division Manager
Hetch Hetchy Water and Power
PO Box 160
Moccasin, CA 95347
Telephone: (209) 989-2063
Electronic mail: mhannaford@sfwater.org

With a copy to:

Theresa Mueller
Chief Energy and Telecommunications Deputy
Office of City Attorney Dennis J. Herrera
Room 234, City Hall
San Francisco, CA 94102
Telephone: (415) 554-4640
Electronic mail: theresa.mueller@sfcityatty.org