

December 19, 2017

The Honorable Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street. NE Washington, DC 20426

> **California Independent System Operator Corporation** Docket No. ER06-58-

> > Informational Filing of Update to Technical Information in Pseudo PGA with CCFC Sutter Energy, LLC

Dear Secretary Bose:

The California Independent System Operator Corporation ("CAISO") submits for informational purposes this update to the technical information contained in schedule 1 to the Pseudo Participating Generator Agreement ("Sutter Pseudo PGA") between the CAISO and CCFC Sutter Energy, LLC ("CCFC Sutter").1 The update will become effective on February 22, 2018, the date of the next update of the CAISO's network model and the corresponding update to its Master File. The CAISO will concurrently process an update to the Master File.

L Background

The Sutter Pseudo PGA sets forth terms and conditions pursuant to which CCFC Sutter's Generating Unit ("Sutter Unit"), which is located at a Pseudo-Tie, participates in the CAISO markets.² The Commission accepted the Sutter

The CAISO submits this informational filing pursuant to section 11.8 of the Sutter Pseudo PGA. The Sutter Pseudo PGA is designated as Service Agreement No. 630 under the CAISO tariff. Because the Sutter Pseudo PGA has not previously been included in the Commission's eTariff system, with this filing the CAISO is including it in eTariff with the informational update provided herein. The original counterparty to the Sutter Pseudo PGA was Calpine Construction Finance Company, L.P., until it assigned the Sutter Pseudo PGA to CCFC Sutter in 2013.

The CAISO tariff defines a Pseudo-Tie as "[a] functionality by which the output of a generating unit physically interconnected to the electric grid in a Native Balancing Authority Area is telemetered to and deemed to be produced in an Attaining Balancing Authority Area that provides Balancing Authority services for and exercises Balancing Authority jurisdiction over the Pseudo-Tie generating unit." CAISO tariff appendix A, definition of "Pseudo-Tie".

The Honorable Kimberly D. Bose December 19, 2017 Page 2

Pseudo PGA for filing in the captioned proceeding.3

Section 1 of schedule 1 to the Sutter Pseudo PGA sets forth technical information regarding the Sutter Unit. That information may be updated pursuant to section 4.1.5 of the Sutter Pseudo PGA, which states that, unless the Sutter Unit fails to test at the values reflected in the proposed update in accordance with the timeline described in the section, the update will become effective upon the effective date for the next scheduled update of the CAISO's Master File. Section 11.8 of the Sutter Pseudo PGA requires any such update to be filed with the Commission for informational purposes.

II. Informational Update

CCFC Sutter has provided an update to its schedule 1 technical information in accordance with section 4.1.5 of the Sutter Pseudo PGA to facilitate commercial negotiations concerning the Sutter Unit.⁴ The CAISO will test the Sutter Unit at the updated values and the update will become effective on February 22, 2018, the date of the next update of the CAISO's network model and the corresponding update to the Master File.

See Cal. Indep. Sys. Operator Corp., 113 FERC ¶ 61,261 (2005); Commission Letter Order, Docket No. ER06-58-001 (Mar. 1, 2006) (accepting CAISO compliance filing). The Sutter Pseudo PGA predates and does not conform to the *pro forma* Pseudo-Tie Participating Generator Agreement contained in appendix B.16 to the CAISO tariff.

CCFC Sutter will enter into a *pro forma* Pseudo-Tie Participating Generator Agreement and a *pro forma* Meter Service Agreement under the CAISO tariff upon further request to modify schedule 1 of the Sutter Pseudo PGA.

The Honorable Kimberly D. Bose December 19, 2017 Page 3

If there are any questions concerning this filing, please contact the undersigned.

Respectfully submitted,

By: /s/ John C. Anders

Roger E. Collanton General Counsel John C. Anders **Assistant General Counsel** California Independent System **Operator Corporation** 250 Outcropping Way Folsom, CA 95630 Tel: (916) 608-7287

Fax: (916) 608-7222 janders@caiso.com

Attorneys for the California Independent System Operator Corporation

CALIFORNIA INDEPENDENT SYSTEM OPERATOR

AND

CALPINE CONSTRUCTION FINANCE COMPANY, L.P.

PSEUDO PARTICIPATING GENERATOR AGREEMENT



PSEUDO PARTICIPATING GENERATOR AGREEMENT

	REEMENT is dated this day of and between:	, and is entered
(1)	Calpine Construction Finance Company, I principal place of business located at 5087-A California 95993 (the "Pseudo Participating Construction of the Construction of	South Township Road, Yuba City,
and		
(2)	California Independent System Operator Opublic benefit corporation having a principal oplace in the State of California as the ISO Gottime designate, initially 151 Blue Ravine Roa "ISO").	executive office located at such overning Board may from time to

The Pseudo Participating Generator and the ISO are hereinafter referred to as the "Parties".

Whereas:

- **A.** The ISO Tariff provides that the ISO shall not schedule Energy or Ancillary Services generated by any Generating Unit otherwise than through a Scheduling Coordinator.
- B. The ISO Tariff further provides that the ISO shall not be obliged to accept Schedules or Adjustment Bids or bids for Ancillary Services relating to Generation from any Generating Unit unless the relevant Generator undertakes in writing to the ISO to comply with all applicable provisions of the ISO Tariff.
- C. The Pseudo Participating Generator owns a Generating Unit physically interconnected in a Native Control Area other than the ISO Control Area.
- D. The Pseudo Participating Generator and the ISO wish to implement and operate a pilot program for a Pseudo Generating Unit for a dynamic functionality to allow the Pseudo Participating Generator to Schedule Energy and to submit Adjustment Bids, Supplemental Energy bids, and bids for Ancillary Services to the ISO through a Scheduling Coordinator dynamically from a Pseudo Tie into the ISO Control Area from the Native Control Area.

E. Except as set forth in this Agreement, the Pseudo Participating Generator wishes to undertake to the ISO that it will comply with the applicable provisions of the ISO Tariff for a Participating Generator.

F. The Parties are entering into this Agreement in order to establish the terms and conditions on which the ISO and the Pseudo Participating Generator will discharge their respective duties and responsibilities under the pilot program for a Pseudo Generating Unit.

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

ARTICLE I DEFINITIONS AND INTERPRETATION

- **1.1 Master Definitions Supplement.** Except as set forth in Section 1.2, all terms and expressions used in this Agreement shall have the same meaning as those contained in the Master Definitions Supplement to the ISO Tariff.
- **1.2 Special Definitions.** When used with initial capitalization herein, the following terms shall have the meanings set forth below:
- **1.2.1** Attaining Control Area: The NERC defined Control Area where the Pseudo Generating Unit output is fully included for purposes of calculation of Area Control Error ("ACE") and meeting Control Area Load responsibilities.
- **1.2.2 Native Control Area:** The NERC defined Control Area where the Pseudo Generating Unit is physically interconnected to the electric grid.
- 1.2.3 Pseudo Generating Unit: A Generating Unit (or group of Generating Units comprising a generating plant) interconnected externally to the ISO Control Area, authorized by this Agreement to receive applicable Control Area Services from the ISO and to operate the under the jurisdiction of the ISO in accordance with the ISO Tariff just as any other Generating Unit of an ISO Participating Generator.
- **1.2.4** Pseudo Tie: The point at which a Pseudo Generating Unit is interconnected to its Native Control Area.
- **1.3** Rules of Interpretation. The following rules of interpretation and conventions shall apply to this Agreement:
 - (a) if there is any inconsistency between this Agreement and the ISO Tariff, this Agreement will prevail to the extent of the inconsistency;
 - (b) the singular shall include the plural and vice versa;



- (c) the masculine shall include the feminine and neutral and vice versa;
- (d) "includes" or "including" shall mean "including without limitation";
- references to a Section, Article or Schedule shall mean a Section, Article or a Schedule of this Agreement, as the case may be, unless the context otherwise requires;
- (f) a reference to a given agreement or instrument shall be a reference to that agreement or instrument as modified, amended, supplemented or restated through the date as of which such reference is made;
- (g) unless the context otherwise requires, references to any law shall be deemed references to such law as it may be amended, replaced or restated from time to time;
- (h) unless the context otherwise requires, any reference to a "person" includes any individual, partnership, firm, company, corporation, joint venture, trust, association, organization or other entity, in each case whether or not having separate legal personality;
- (i) unless the context otherwise requires, any reference to a Party includes a reference to its permitted successors and assigns;
- (j) any reference to a day, week, month or year is to a calendar day, week, month or year; and
- (k) the captions and headings in this Agreement are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the terms and conditions of this Agreement.

ARTICLE II ACKNOWLEDGEMENTS OF PSEUDO PARTICIPATING GENERATOR AND ISO

2.1 ISO Responsibility. The Parties acknowledge that the ISO is responsible for the efficient use and reliable operation of the ISO Controlled Grid and ISO Control Area consistent with achievement of planning and operating reserve criteria no less stringent than those established by the Western Electricity Coordinating Council and the North American Electric Reliability Council and further acknowledges that the ISO may not be able to satisfy fully these responsibilities if the Pseudo Participating Generator fails to fully comply with all of its obligations under this Agreement and the ISO Tariff.



ARTICLE III TERM AND TERMINATION

3.1 Effective Date. This Agreement shall be effective as of the date accepted for filing and made effective by FERC, and shall remain in full force and effect until terminated pursuant to Section 3.2 of this Agreement.

3.2 Termination

- 3.2.1 Termination by ISO. The ISO reserves the right to terminate this Agreement without cause by giving thirty (30) days advance written notice of termination. Additionally, the ISO may terminate this Agreement by giving written notice of termination in the event that the ISO's agreement with the Native Control Area has terminated or the Pseudo Participating Generator commits any material default under this Agreement and/or the ISO Tariff which, if capable of being remedied, is not remedied within thirty (30) days after the ISO has given, to the Pseudo Participating Generator, written notice of the default, unless excused by reason of Uncontrollable Forces in accordance with Article X of this Agreement.
- **3.2.2 Termination by Pseudo Participating Generator.** In the event that the Pseudo Participating Generator no longer wishes to be considered part of the ISO Control Area, it may terminate this Agreement, on giving the ISO ninety (90) days advance written notice.
- 3.2.3 Termination or Extension of Pilot Program. The Pseudo Generating Unit pilot program shall extend for a minimum of two (2) years from the effective date of this Agreement. Sixty (60) days prior to the end of the two-year pilot program period, the ISO shall determine whether (i) the pilot program has been demonstrated to be successful and can be implemented on a permanent basis; (ii) the pilot program has been unsuccessful and the ISO should issue a notice of termination for this Agreement; or (iii) the results of the pilot program have been inconclusive and the pilot program should be extended for another year, in which case the ISO will make the same determination sixty (60) days prior to the end of the one-year extension.
- 3.2.4 Filing. With respect to any notice of termination given pursuant to this Section 3.2, the ISO must file a timely notice of termination with FERC. The filing of the notice of termination by the ISO will be considered timely if: (1) the filing of the notice of termination is made after the preconditions for termination have been met, and (2) the ISO files the notice of termination within thirty (30) days after receipt of a request for termination from the Pseudo Participating Generator or within sixty (60) days after issuance of its own notice of termination. This Agreement shall terminate upon acceptance by FERC of such a notice of termination.



ARTICLE IV GENERAL TERMS AND CONDITIONS

- 4.1 Pseudo Tie Requirements and Pseudo Participating Generator Obligations
- 4.1.1 The Pseudo Generating Unit pilot program established under this Agreement shall be implemented and operated in accordance with this Agreement, applicable provisions of the ISO Tariff and the Interconnected Control Area Operating Agreement between the ISO and the Sacramento Municipal Utility District ("SMUD") (the Pseudo Generating Unit's Native Control Area), and all applicable NERC and WECC policies, requirements, and provisions.
- **4.1.2** The technical characteristics of the Pseudo Generating Unit and associated Pseudo Tie are set forth in Schedule 1. The Pseudo Participating Generator may request, and the ISO may agree, at its sole discretion, to change the foregoing ISO intertie association, subject to any limitations set forth in Schedule 2.
- **4.1.3** The terms and conditions for the Pseudo Generating Unit pilot program implemented between the ISO and the Pseudo Participating Generator for the Pseudo Tie to the ISO Control Area from the Pseudo Generating Unit listed in Schedule 1 are set forth in Schedule 2.
- 4.1.5 Notification of Changes. Sixty (60) days prior to changing any technical information in Schedule 1, the Pseudo Participating Generator shall notify the ISO of the proposed changes. Pursuant to Section 2.5.25 of the ISO Tariff, the ISO may verify, inspect and test the capacity and operating characteristics provided in the revised Schedule 1. Unless the Pseudo Participating Generator fails to test at the values in the proposed change(s), the change will become effective upon the effective date for the next scheduled update of the ISO's Master File, provided the Pseudo Participating Generator submits the changed information by the applicable deadline and is tested by the deadline.
- **4.2 Agreement Subject to ISO Tariff.** The Parties will comply with all applicable provisions of the ISO Tariff, including Sections 2.3.2, 2.5.6.2, and 5. This Agreement shall be subject to the ISO Tariff, which shall be deemed to be incorporated herein.
- 4.3 Obligations Relating to Ancillary Services
- **4.3.1 Submission of Bids.** When the Scheduling Coordinator on behalf of the Pseudo Participating Generator submits a bid for Ancillary Services, the Pseudo Participating Generator will, by the operation of this Section 4.3.1, warrant to the ISO that it has the capability to provide that service in accordance with the ISO



Tariff and that it will comply with ISO Dispatch Instructions for the provision of the service in accordance with the ISO Tariff.

- 4.4 Obligations relating to Major Incidents
- **4.4.1 Major Incident Reports.** The Pseudo Participating Generator shall promptly provide such information as the ISO may reasonably request in relation to major incidents, in accordance with Section 5.8.3 of the ISO Tariff.

ARTICLE V PENALTIES AND SANCTIONS

5.1 General. The Pseudo Participating Generator shall be subject to all penalties made applicable to Participating Generators within the ISO Control Area.

ARTICLE VI COSTS

6.1 Operating and Maintenance Costs. The Pseudo Participating Generator shall be responsible for all its costs incurred for the purpose of meeting its obligations under this Agreement.

ARTICLE VII DISPUTE RESOLUTION

7.1 Dispute Resolution. The Parties shall make reasonable efforts to settle all disputes arising out of or in connection with this Agreement. In the event any dispute is not settled, the Parties shall adhere to the ISO ADR Procedures set forth in Section 13 of the ISO Tariff, which is incorporated by reference, except that any reference in Section 13 of the ISO Tariff to Market Participants shall be read as a reference to the Pseudo Participating Generator and references to the ISO Tariff shall be read as references to this Agreement.



ARTICLE VIII REPRESENTATIONS AND WARRANTIES

8.1 Representation and Warranties. Each Party represents and warrants that the execution, delivery and performance of this Agreement by it has been duly authorized by all necessary corporate and/or governmental actions, to the extent authorized by law.

ARTICLE IX LIABILITY

9.1 Liability. The provisions of Section 14 of the ISO Tariff will apply to liability arising under this Agreement, except that all references in Section 14 of the ISO Tariff to Market Participants shall be read as references to the Pseudo Participating Generator and references to the ISO Tariff shall be read as references to this Agreement.

ARTICLE X UNCONTROLLABLE FORCES

10.1 Uncontrollable Forces Tariff Provisions. Section 15 of the ISO Tariff shall be incorporated by reference into this Agreement except that all references in Section 15 of the ISO Tariff to Market Participants shall be read as a reference to the Pseudo Participating Generator and references to the ISO Tariff shall be read as references to this Agreement.

ARTICLE XI MISCELLANEOUS

- 11.1 Assignments. Subject to Section 3.2.1 of this Agreement, either Party may assign or transfer any or all of its rights and/or obligations under this Agreement with the other Party's prior written consent in accordance with Section 17 of the ISO Tariff. Such consent shall not be unreasonably withheld. Any such transfer or assignment shall be conditioned upon the successor in interest accepting the rights and/or obligations under this Agreement as if said successor in interest was an original Party to this Agreement.
- **11.2 Notices.** Any notice, demand or request which may be given to or made upon either Party regarding this Agreement shall be made in accordance with Section 20.1 of the ISO Tariff. A Party must update the information in Schedule 3 of this



- Agreement as information changes. Such changes shall not constitute an amendment to this Agreement.
- 11.3 Waivers. Any waivers at any time by either Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.
- 11.4 Governing Law and Forum. This Agreement shall be deemed to be a contract made under, and for all purposes shall be governed by and construed in accordance with, the laws of the State of California, except its conflict of law provisions. The Parties irrevocably consents that any legal action or proceeding arising under or relating to this Agreement to which the ISO ADR Procedures do not apply, shall be brought in any of the following forums, as appropriate: any court of the State of California, any federal court of the United States of America located in the State of California, or, where subject to its jurisdiction, before the Federal Energy Regulatory Commission.
- 11.5 Consistency with Federal Laws and Regulations. This Agreement shall incorporate by reference Section 20.8 of the ISO Tariff as if the references to the ISO Tariff were referring to this Agreement.
- **11.6 Merger.** Except as specifically provided in Section 4.1.1, this Agreement constitutes the complete and final agreement of the Parties with respect to the subject matter hereto and supersedes all prior agreements, whether written or oral, with respect to such subject matter.
- 11.7 Severability. If any term, covenant, or condition of this Agreement or the application or effect of any such term, covenant, or condition is held invalid as to any person, entity, or circumstance, or is determined to be unjust, unreasonable, unlawful, imprudent, or otherwise not in the public interest by any court or government agency of competent jurisdiction, then such term, covenant, or condition shall remain in force and effect to the maximum extent permitted by law, and all other terms, covenants, and conditions of this Agreement and their application shall not be affected thereby, but shall remain in force and effect and the Parties shall be relieved of their obligations only to the extent necessary to eliminate such regulatory or other determination unless a court or governmental agency of competent jurisdiction holds that such provisions are not separable from all other provisions of this Agreement.
- **11.8 Amendments.** This Agreement and the Schedules attached hereto may be amended from time to time by the mutual agreement of the Parties in writing. Amendments that require FERC approval shall not take effect until FERC has accepted such amendments for filing and made them effective. If the



Rv.

amendment does not require FERC approval, the amendment will be filed with FERC for information. Nothing contained herein shall be construed as affecting in any way the right of the ISO 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.

11.9 Counterparts. This Agreement 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 Agreement.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement 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

Name:	
Calpin	ne Construction Finance Company, L.P.
_	
Ву:	
Name:	
Name: Title:	

Section 1: Technical Characteristics of Pseudo Participating Generator Units Calpine Construction Finance Company, L.P.

Name of Facility	QF	Name of Generating				Designed Gross (Nameplate) Capacity 1/	Limitations
(Including Unit Number)	(Y/N)	Unit Owner	ISO Resource ID	Type of Unit	Primary Fuel Type	(MW)	(Reference #)
(menumg emeriumser)	(2/11)	Cint Owner	150 Resource 15	Type of Cint	11mmi y 1 dei 1 ype	(2/2/17)	(Iterer elice ")
	+						
	+						
				+			
	-						
	-						
	+				1		
	+			1	1		
					1		

^{1/} Current effective values for purposes of scheduling Energy and bidding to provide Energy and/or Ancillary Services in ISO markets may differ from those set forth in this Schedule 1, depending on the results of ISO performance testing pursuant to Sections 2.5.24 and 2.5.25 of the ISO Tariff and Section 9 of the ISO Ancillary Services Requirements Protocol. This and other values are subject to certification by the ISO in accordance with Section 4.3.2 of the Participating Generator Agreement. More detailed Generating Unit operating data must be provided at a time and in a format specified by the ISO in response to ISO requests pursuant to ISO Tariff Sections 5.3 and 5.8.1.

Section 2: Limitations Calpine Construction Finance Company, L.P.

Reference #	Description of Limitation		
L			

Revision Date: 12/12/2017 Form Revised: 10/11/2005

Section 3: Native Control Area, Intermediate Control Areas, and ISO Intertie(s) for the Calpine Construction Finance Company, L.P.

Native Balancing Authority Area	Intermediate Balancing Authority Areas	CAISO Interties
	, ·	
		
1		I .

Revision Date: 12/12/2017 Form Revised: 10/11/2005



PSEUDO GENERATING UNIT PILOT PROGRAM TERMS

[Section 4.1.3]

The terms and conditions set forth in this Schedule 2 shall apply to the Pseudo Participating Generator's participation in this ISO Pseudo Generating Unit pilot program, including procurement of applicable Control Area services from the ISO and the ability to engage in dynamic transfers of Energy and Ancillary Services to the ISO Control Area.

1. Consistency with NERC/WECC

- 1.1 Operation of Pseudo Tie functionalities must comply with all applicable NERC and WECC policies, requirements, and guidelines regarding inter-Control Area scheduling. The Pseudo Tie must be registered as a "Point Of Delivery" (POD) on NERC's Transmission Service Information Network (TSIN).
- 1.2 Operation and/or associated scheduling of Pseudo Tie functionalities must be consistent with the NERC Dynamic Transfer White Paper, which was approved by the NERC Operating Committee on March 25, 2004 as a reference document, and any resulting NERC standards and/or policies.
- 1.3 All (off-system) static scheduling associated with the Pseudo Tie functionality must be consistent with NERC Reliability Standards for the Bulk Electric Systems of North America (Standard INT-001-0 Interchange Transaction Tagging, Standard INT-002-0 Interchange Transaction Tag Communication and Assessment, Standard INT-003-0 Interchange Transaction Implementation, and Standard INT-004-0 Interchange Transaction Modifications).

2. ISO operating, technical, and business requirements

2.1 Operating

- **2.1.1** The ISO will establish the Pseudo Tie between the ISO Control Area and the Native Control Area, will specify the location of that Pseudo Tie point, and will require that it be registered as a point of delivery and Generating Unit within the ISO Control Area.
- **2.1.2** The Pseudo Generating Unit must transfer dynamically its entire output of its real time Generation production into the ISO Control Area at the associated preexisting ISO intertie.



2.1.3 The ISO will treat all off-system sales from the Pseudo Tie as firm fixed static export schedules from the ISO Control Area.

2.1.4 [INTENTIONALLY LEFT BLANK]

- 2.1.5 Long-term firm transmission must be reserved for the Pseudo Tie transfers into the ISO Control Area across the entire transmission path external to the ISO Control Area sufficient to permit delivery of an amount equal to at least the minimum Generation of the Pseudo Generating Unit.
- **2.1.6** All Energy transfers associated with Pseudo Ties must be electronically tagged (e-tagged).
- 2.1.7 The ISO will treat all dynamically transferred Pseudo Tie Energy as internal ISO Control Area Generation (except that it will be subject to Congestion at the associated pre-existing ISO intertie) and will procure, or ensure self-provision of, the WECC Minimum Operating Reliability Criteria ("MORC") required Operating Reserves for the ISO Control Area Loads served by Pseudo Generating Units.
- 2.1.8 All dynamic Energy transfers from the Pseudo Tie associated with ISO procurement of Spinning Reserve and Non-Spinning Reserve from Pseudo Generating Units will be afforded similar treatment (i.e. treatment as internal ISO Control Area Generation, except that it will be subject to Congestion at the associated pre-existing ISO intertie).
- **2.1.9** In case the Pseudo Generating Unit is curtailed or forced out of service in real time, the associated Pseudo Tie schedules must be adjusted by the next available Hour Ahead market.
- **2.1.10** Off-system sales pursuant to this Agreement shall only be delivered from the Pseudo Generating Unit. The maximum allowable off-system sales of Energy at a Pseudo Tie may not exceed the Pseudo Generating Unit's forward Energy schedule for the respective hour.
- **2.1.11** In real-time, the total output of the Pseudo Generating Unit shall be telemetered to the ISO. Off system sales shall be treated as an export from the ISO Control Area.
- **2.1.12** The Pseudo Generating Unit will operate under the terms of the ISO Tariff applicable to the Generating Units of Participating Generators in the ISO Control Area, including the ISO's implementation of FERC's "must-offer" requirements.



- 2.1.13 In real time, the dynamic transfer from the Pseudo Tie must not exceed the maximum value established by the combination of the Day Ahead and Hour Ahead (DA/HA) accepted Energy and Ancillary Services schedules plus any accepted Supplemental Energy bids plus any response to the ISO's real-time dispatch instructions. The composite value of the schedule derived from the DA/HA accepted schedules plus any Supplemental Energy bids and dispatch instruction response represents not only the Pseudo Generating Unit's estimated Energy, but also transmission reservation on the associated ISO intertie. The Pseudo Generating Unit shall be curtailed accordingly whenever its Generation output, less any off-system sales, is greater than the associated transmission allocation.
- 2.1.14 The ISO may, at its discretion, either limit or forego procuring any or all Ancillary Services at the particular pre-existing Control Area interties to ensure that Operating Reserves are adequately dispersed throughout the ISO Control Area as required by the WECC MORC.
- **2.1.15** The ISO shall provide to the Pseudo Generating Unit all Control Area services available to other Generating Units in the ISO Control Area, including the auxiliary load needs of the Pseudo Generating Unit.
- **2.1.16** The ISO, SMUD, and Western will develop a coordinated operating procedure to facilitate the continued delivery of Energy and Ancillary Services from the Pseudo Generator to the desired delivery points in the event the primary contract path is unavailable or curtailed.

2.2 Technical

- **2.2.1** All applicable communication and telemetry requirements of the WECC, the ISO, and the Pseudo Generating Unit's Native Control Area regarding generating units and inter-Control Area interties must be satisfied.
- **2.2.2** Proper incorporation of the dynamic signal into all involved Control Areas' ACE equations will be required.
- **2.2.3** If there is no Generation schedule in the DA/HA or Supplemental Energy markets, the Pseudo Generating Unit shall not generate except when issued an Out of Market call from the ISO.
- **2.2.4** If the Pseudo Participating Generator desires to participate in ISO's Regulation market, all provisions of the ISO's Standards for Imports of Regulation regarding the technical arrangements for Regulation shall apply.



2.3 Business

- **2.3.1** Energy delivered from a Pseudo Generating Unit will be subject to all provisions of the ISO's Imbalance Energy markets, including Uninstructed Deviation Penalties (UDP) (just as is the case with all other ISO intra-Control Area Generating Units of Participating Generators).
- **2.3.2** All Ancillary Services delivered from a Pseudo Generating Unit will be subject to the ISO's compliance monitoring and remedies, just as any ISO intra-Control Area Generating Units of Participating Generators.
- **2.3.3** All DA/HA Schedules from the Pseudo Generating Unit shall be subject to ISO Congestion Management, and as such may not exceed their transmission reservations in real time.
- 2.3.4 For settlements, the Energy transferred dynamically from the Pseudo Generating Unit during an operating hour will be calculated as the difference between the Generating Unit revenue meter value and any static off-system sales at a Pseudo Tie (which will be deemed delivered) for that operating hour.
- **2.3.5** All Energy from the Pseudo Tie shall be subject to GMMs established for the Pseudo Generating Unit.
- **2.3.6** Any transmission losses and other transmission related costs attributable to the Pseudo Generating Unit on the non-ISO transmission system will remain the responsibility of the Pseudo Participating Generator.
- 2.3.7 A Pseudo Generating Unit must be permanently associated with a particular preexisting ISO intertie. Any dynamic transfers of Energy, Supplemental Energy,
 and/or Energy associated with Ancillary Services will be subject to Congestion
 mitigation at the associated pre-existing ISO intertie. The ISO may, from time to
 time and at its discretion, allow for a change in such pre-established association
 of the Pseudo Generating Unit with a particular ISO intertie. Any change to the
 designated path is subject to approval by all applicable transmission providers.
- **2.3.8** Pseudo Generating Units providing Ancillary Services to the ISO Control Area must be certified by the ISO prior to providing such services.
- **2.3.9** Only one dynamic transfer signal maybe associated with any Pseudo Generating Unit.
- **2.3.10** Should there be any need or requirement, whether operational or procedural, for the ISO to make real time adjustments to the ISO's inter-Control Area schedules at the pre-existing ISO intertie associated with the Pseudo Generating Unit



- (including curtailments), the dynamic transfer from the Pseudo Generating Unit shall be treated in the same manner as any ISO interchange schedule at that pre-existing ISO intertie.
- **2.3.11** The Pseudo Generating Unit shall be subject to ISO Tariff provisions for local market power mitigation.
- **2.3.12** The Pseudo Generating Unit will be able to set the Market Clearing Price in accordance with the ISO Tariff in all applicable ISO markets.
- 2.3.13 The ISO shall assess charges to the Scheduling Coordinator for the Pseudo Participating Generator on the same basis as they apply to any other ISO intra-Control Area Generating Unit supplying 100% of its output to the ISO, subject to the provisions of this Section 2.3.12. Any off-system sales of Energy shall be subject to all export charges except the Wheeling Access Charge (WAC).
- 2.3.13.1 Any transfers from the Pseudo Generating Unit scheduled into the ISO Control Area shall be subject to ISO charges associated with the DA/HA and real time Congestion mitigation at the associated pre-existing ISO tie (just as any other static or dynamic ISO Control Area interchange schedule at that pre-existing intertie).
- 2.3.13.2 Imbalance Energy charges shall apply only to the deviations between (i) the scheduled Generation, plus any instructed Energy, and (ii) the metered Generation from the Pseudo Generating Unit.
- 2.3.13.3 The Grid Management Charge shall be assessed to the Generation schedules(s) from the Pseudo Generating Unit and to the (net static) exports originating from the Pseudo Generating Unit at the Pseudo Tie.
- **2.3.14** The Pseudo Participating Generator shall be subject to all applicable terms of the ISO's market redesign (MRTU), for which the ISO will develop revisions to the terms applicable to Pseudo Ties as necessary.

3. Operating Agreements

- 3.1 The Pseudo Generating Unit pilot program shall be conditional on the facilitation by SMUD as the Native Control Area of the Pseudo Tie functionality in accordance with the Interconnected Control Area Operating Agreement between SMUD and the ISO.
- 3.2 The Pseudo Participating Generator shall comply with its contractual obligations with the owners of the facilities to which the Pseudo Generating Unit is



interconnected and/or the Native Control Area that affect in any way the ability of the Pseudo Participating Generator to perform its obligations under this Agreement.



NOTICES [Section 11.2]

Pseudo Participating Generator

Name of Primary

Representative: Steve Royall

Title: General Manager

Company: Calpine Construction Finance Company, L.P.

Address: 5087-A S. Township Road

(P.O. Box 3330, ZIP 95992)

City/State/Zip Code Yuba City, CA 95993

Email Address: stever@calpine.com

Phone: (530) 821-2072

Fax No: (530) 821-2045

Name of Alternative

Representative: John Snead

Title: Operations Manager

Company: Calpine Construction Finance Company, L.P.

Address: 5087-A S. Township Road

(P.O. Box 3330, ZIP 95992)

City/State/Zip Code Yuba City, CA 95993

Email Address: johnsn@calpine.com

Phone: (530) 821-2073

Fax No: (530) 821-2045



ISO

Name of Primary

Representative: Michael D. Dozier

Title: Lead Contracts Negotiator

Address: 151 Blue Ravine Road

City/State/Zip Code Folsom, CA 95630

Email Address: mdozier@caiso.com

Phone: (916) 608-5708

Fax No: (916) 351-2487

Name of Alternative

Representative: Philip D. Pettingill

Title: Manager of Infrastructure Policy & Contracts Negotiation

Address: 151 Blue Ravine Road

City/State/Zip Code Folsom, CA 95630

Email Address: ppettingill@caiso.com

Phone: (916) 608-7241

Fax No: (916) 351-2264

CERTIFICATE OF SERVICE

I certify that I have served the foregoing document upon the parties listed on the official service list in the captioned proceedings, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Washington, DC this 19th day of December, 2017.

/s/ Daniel Klein
Daniel Klein