

California Independent System Operator Corporation

September 30, 2011

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

Re: California Independent System Operator Corporation Filing of non-conforming Service Agreement No. 1983 Docket No. ER11-____-000

Dear Secretary Bose:

The California Independent System Operator Corporation ("CAISO") submits for Commission filing and acceptance an agreement for a pilot pseudotie of Mesquite Solar 1, LLC's ("Mesquite Solar") generating facility to the CAISO balancing authority area.¹ This agreement, called the Pseudo Participating Generator Agreement ("Pseudo PGA"), is similar to pilot pseudo-tie agreements that the CAISO has submitted and the Commission has accepted previously. The CAISO proposes that the Pseudo PGA be made effective on November 1, 2011.²

I. The Purpose of and Background Concerning the Pseudo PGA

The purpose of this Pseudo PGA is to provide for the creation of a pseudo-tie of the Mesquite Solar 1 generating facility to the CAISO balancing authority area. The Mesquite Solar 1 generating facility is a 170 MW photovoltaic project that, although physically located in the balancing authority area of the Salt River Project Agricultural Improvement and Power District ("SRP"), will be fully included in the CAISO balancing authority area via the pseudo-tie.³ The

¹ The CAISO submits the Pseudo PGA pursuant to Section 205 of the Federal Power Act, 16 U.S.C. § 824d and Part 35 of the Commission's regulations, 18 C.F.R. Part 35, and in compliance with Order No. 714, *Electronic Tariff Filings*, FERC Stats. & Regs. ¶ 31,276 (2009).

² This pseudo-tie arrangement will be conditioned upon an operating agreement between the CAISO and SRP currently being negotiated, which will be filed for Commission acceptance (see Section 1.3.1 of CAISO Tariff, Appendix N, requiring the CAISO and the native balancing authority area to have in effect an operating agreement as approved effective October 1, 2011 in FERC Docket No. ER11-4161-000).

³ Mesquite Solar 1 is interconnected to SRP at the Hassayampa switchyard.

The Honorable Kimberly D. Bose September 30, 2011 Page 2

Mesquite Solar 1 generating facility is established as a "Pseudo Generating Unit" under the Pseudo PGA.⁴ Section 1.2.3 of the Pseudo PGA defines a Pseudo Generating Unit as "[a] Generating Unit (or group of Generating Units comprising a generating plant) interconnected externally to the CAISO balancing authority area, authorized by [the Pseudo PGA] to receive applicable balancing authority services from the CAISO and to operate under the jurisdiction of the CAISO in accordance with the CAISO Tariff just as any other Generating Unit of a CAISO Participating Generator." The Pseudo PGA will permit the Mesquite Solar 1 generating facility, even though it is interconnected externally to the CAISO balancing authority area, to submit self-schedules and bids for energy and ancillary services to the CAISO through a scheduling coordinator dynamically from a pseudo-tie into the CAISO balancing authority area from the SRP balancing authority area.⁵ Except as set forth in the Pseudo PGA, Mesquite Solar 1 will comply with the applicable provisions of the CAISO tariff for a participating generator.⁶

The proposed new pseudo-tie will provide Mesquite Solar 1 important support for commitments associated with the project's Department of Energy ("DOE") financing and with the project's sale of all its power to Pacific Gas and Electric Company ("PG&E") under a long term power purchase agreement. The pseudo-tie will allow the project to deliver energy and ancillary services to the CAISO balancing authority area as a pseudo-tie participating generator. The Mesquite Solar 1 generating facility is in the final stages of construction and testing, with initial operations commencing as early as November 1, 2011. At this time, however, the CAISO and SRP negotiations with respect to an operating agreement to address matters of significance to coordination among the native and attaining balancing authority areas have not yet been concluded. This CAISO-SRP operating agreement is necessary for the Mesquite Solar 1 pseudotie to become operational as a pseudo-tie to the CAISO balancing authority area.

The CAISO filed in Docket No. ER11-4161-000 a set of tariff amendments to implement the expansion of its dynamic transfers policies approved by the CAISO board of governors, which includes pseudo-ties for generating facilities such as Mesquite Solar 1. The CAISO tariff revisions were approved by the

⁴ Capitalized terms not otherwise defined herein have the meanings set forth in the master definitions supplement, Appendix A to the CAISO tariff, and in the Pseudo PGA.

⁵ See Pseudo PGA, Recital (D). Section 1.2.4 of the Pseudo PGA defines a Pseudo-Tie as "[t]he point at which a Pseudo Generating Unit is interconnected to its Native Balancing Authority Area." Section 1.2.2 defines a Native Balancing Authority Area as "[t]he Balancing Authority Area where the Pseudo Generating Unit is physically interconnected to the electric grid."

⁶ See Pseudo PGA, Recital (E).

The Honorable Kimberly D. Bose September 30, 2011 Page 3

Commission effective October 1, 2011, very near in time to the initial operation date for the Mesquite Solar 1 generating facility. The parties anticipate terminating the Pseudo PGA and entering into a Commission-accepted *pro forma* version of a pseudo-tie participating generator agreement as soon as possible. In the meantime, the timing is such that the Pseudo PGA should be implemented to provide immediate assurance in support of commitments associated with the project's DOE financing and with the project's sale of all its power to PG&E under a long term power purchase agreement.

However, as stated above, the CAISO will not make the pseudo-tie operational until the effective date of a CAISO-SRP operating agreement on file with the Commission. The CAISO appreciates the potential hardship this may place on Mesquite Solar 1, but assures the Commission that all parties are working diligently to finalize such an operating agreement and are hopeful to bring it to the Commission within a time frame that minimizes the financial and operational risk to Mesquite Solar 1.

B. The Provisions of the Pseudo PGA

The body of the Pseudo PGA is largely modeled after the applicable portions of the CAISO's *pro forma* Participating Generator Agreement, the CAISO's *pro forma* Dynamic Scheduling Agreement for Scheduling Coordinators, the Pseudo PGA for Calpine Construction Finance Company, L.P. accepted by the Commission in Docket No. ER06-58-000 by letter order dated December 15, 2005, the Pseudo PGA for El Dorado Energy, LLC accepted by the Commission in Docket No. ER10-342-000 by letter order dated January 8, 2010 (as amended in Docket No. ER11-4126-000 by letter order dated September 21, 2011), and the Pseudo PGA for Rice Solar Energy, LLC accepted in Docket No. ER11-3778-000 by letter order dated August 9, 2011. The Pseudo PGA contains the following provisions:

- Article I contains relevant North American Electric Reliability Corporation defined terms, and rules of interpretation of the Pseudo PGA.
- Article II states the responsibility of the CAISO for the efficient use and reliable operation of the CAISO controlled grid, and acknowledges that the CAISO may not be able to satisfy fully these responsibilities if Mesquite Solar 1 fails to fully comply with all of its obligations.
- Article III provides for the effective date and termination of the Pseudo PGA and the pilot pseudo-tie program.
- Article IV contains the general terms and conditions regarding pseudo-tie requirements and Mesquite Solar 1's obligations, the requirement to comply with all applicable provisions of the CAISO tariff, and obligations relating to ancillary services and major incidents.

- Article V states that Mesquite Solar 1 will be subject to all penalties made applicable to participating generators within the CAISO balancing authority area.
- Article VI states that Mesquite Solar 1 will be responsible for all costs incurred for the purpose of meeting its obligations under the Pseudo PGA.
- Articles VII through XI contain standard provisions concerning dispute resolution, liability, uncontrollable forces, etc., which are very similar to the provisions of the *pro forma* Participating Generator Agreement and the *pro forma* Dynamic Scheduling Agreement for Scheduling Coordinators in this regard. Section 11.1 contains special provisions regarding the right of Mesquite Solar 1 to assign the Pseudo PGA.

In addition, the Pseudo PGA contains the following schedules:

- Schedule 1, which sets forth relevant technical information. This information includes the Pmax for Mesquite Solar 1 (i.e., the maximum quantity that may be scheduled), which has been set at 175 MW to allow for the possibility of a small amount of overproduction by the nominal 170 MW photovoltaic facility.
- Schedule 2, which sets forth the terms and conditions that apply to • Mesquite Solar 1's participation in the pilot program, including procurement of applicable balancing authority services from the CAISO and the ability to engage in dynamic transfers of energy and ancillary services to the CAISO balancing authority area. In addition, Schedule 2 includes the ability for the CAISO to curtail the Pseudo Generating Unit in the event of an imminent reliability issue on the CAISO intertie and if the real-time dynamic transfer value for the Pseudo Generating Unit exceeds the final CAISO market schedules. As an Eligible Intermittent Resource there are additional provisions associated with forecasts, forecast fees, and data requirements. CAISO balancing authority service for auxiliary load for the Pseudo Generating Unit will be available, provided firm transmission service is reserved from the CAISO intertie to the pseudo-tie. The terms and conditions applicable to Mesquite Solar 1 are either the same, more restrictive, or in some cases not appropriate in relation to those applied to Participating Generators under the CAISO tariff.
- Schedule 3, which provides notice information for Mesquite Solar 1 and the CAISO.

The provisions of the Pseudo PGA are agreed to by the parties. The CAISO requests that the Commission accept the Mesquite Solar 1 Pseudo Participating Generator Agreement as filed as non conforming service agreement no. 1983.

The Honorable Kimberly D. Bose September 30, 2011 Page 5

V. Effective Date and Request for Waiver

The CAISO requests that the Pseudo PGA included in the instant filing be made effective November 1, 2011. The CAISO requests waiver, pursuant to Section 35.11 of the Commission's regulations (18 C.F.R. § 35.11), of the 60-day notice requirement set forth in Section 35.3 of the Commission's regulations (18 C.F.R. § 35.3), and to the extent necessary, the CAISO respectfully requests that the Commission grant any other waivers of Part 35 of its regulations that may be required in connection with the requested effective date. November 1 is the effective date that the CAISO and Mesquite Solar 1 have agreed upon. It is important the Pseudo PGA be made effective as of this date in order for Mesquite Solar 1 to meet commitments associated with its DOE financing and to be eligible for initial operation as soon as the operating agreement between the CAISO and SRP with respect to the pseudo-tie is made effective by the Commission. This will allow the project to begin deliveries to PG&E as soon as the project is capable of generating power; otherwise this renewable energy generating capability could not be put to use. Granting the requested effective date and waiver, therefore, is appropriate.

VI. Expenses

No expense or cost associated with this filing has been alleged or judged in any judicial or administrative proceeding to be illegal, duplicative, unnecessary, or demonstratively the product of discriminatory employment practices.

VII. Service

The CAISO has served copies of this filing upon Mesquite Solar 1, LLC, Salt River Project Agricultural Improvement and Power District, the California Public Utilities Commission, and the California Energy Commission. In addition, the CAISO has posted the filing on the CAISO website.

Enclosed for filing is each of the following:

- (1) this letter of transmittal; and
- (2) the Pseudo PGA (Attachment A).

The Honorable Kimberly D. Bose September 30, 2011 Page 6

VIII. Correspondence

The CAISO requests that all correspondence, pleadings, and other communications concerning this filing be served upon the following:

John C. Anders* Senior Counsel California Independent System Operator Corporation 250 Outcropping Way Folsom, CA 95630 Tel: (916) 608-7287 Fax: (916) 608-7222 E-mail: janders@caiso.com

* Individual designated for service pursuant to Rule 203(b)(3), 18 C.F.R. § 203(b)(3).

VII. Conclusion

The CAISO respectfully requests that the Commission accept this filing and permit the CAISO's submittal of the Pseudo PGA to be effective as of November 1, 2011. If there are any questions concerning this filing, please contact the undersigned.

> Respectfully submitted, **By:** /s/ John C. Anders Nancy Saracino General Counsel Sidney M. Davies Assistant General Counsel John C. Anders Senior 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 Attachment A Pseudo Participating Generator Agreement

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

AND

MESQUITE SOLAR 1, LLC

PSEUDO PARTICIPATING GENERATOR AGREEMENT



PSEUDO PARTICIPATING GENERATOR AGREEMENT

THIS AGREEMENT is dated this <u>12</u> th day of <u>YMay</u>, <u>2011</u>, and is entered into, by and between:

(1) **Mesquite Solar 1, LLC** having registered in the State of Delaware and principal place of business located at 101 Ash Street, HQ 14, San Diego, California 92101 (the "Pseudo Participating Generator");

and

(2) **California Independent System Operator Corporation,** a California nonprofit public benefit corporation having a principal executive office located at such place in the State of California as the CAISO Governing Board may from time to time designate, initially 250 Outcropping Way, Folsom, California 95630 (the "CAISO").

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

Whereas:

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

- E. Except as set forth in this Agreement, the Pseudo Participating Generator wishes to undertake to the CAISO that it will comply with the applicable provisions of the CAISO Tariff that are applicable to a Participating Generator.
- **F.** The Parties are entering into this Agreement in order to establish the terms and conditions on which the CAISO and the Pseudo Participating Generator will discharge their respective duties and responsibilities under the pilot 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 and in the beginning of this Agreement, all terms and expressions used in this Agreement shall have the same meaning as those contained in the Master Definitions Supplement to the CAISO 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 Balancing Authority Area:** The Balancing Authority Area where the Pseudo Generating Unit output is fully included for purposes of calculation of Area Control Error ("ACE") and meeting Balancing Authority Area Load responsibilities.
- **1.2.2 Native Balancing Authority Area:** The Balancing Authority 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 CAISO Balancing Authority Area, authorized by this Agreement to receive applicable Balancing Authority services from the CAISO and to operate under the jurisdiction of the CAISO in accordance with the CAISO Tariff just as any other Generating Unit of a CAISO Participating Generator.
- **1.2.4 Pseudo-Tie:** The point at which a Pseudo Generating Unit is interconnected to its Native Balancing Authority 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 CAISO 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 CAISO

2.1 CAISO Responsibility. The Parties acknowledge that the CAISO is responsible for the efficient use and reliable operation of the CAISO Controlled Grid and the CAISO Balancing Authority Area consistent with achievement of planning and Operating Reserve criteria no less stringent than those established by the Western Electricity Coordinating Council ("WECC") and the North American Electric Reliability Corporation ("NERC") and further acknowledges that the CAISO 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 CAISO 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 CAISO.** The CAISO reserves the right to terminate this Agreement in the event the CAISO reasonably determines that the Pseudo Generating Unit pilot established under this Agreement poses a risk to System Reliability or the risk of a violation of Applicable Reliability Criteria by giving thirty (30) days advance written notice of termination. Additionally, the CAISO may terminate this Agreement by giving written notice of termination in the event that the Native Balancing Authority provides notice to the CAISO of its withdrawal from its agreement with the CAISO to participate in the Pseudo-Tie arrangement or the Pseudo Participating Generator commits any material default under this Agreement and/or the CAISO Tariff which, if capable of being remedied, is not remedied within thirty (30) days after the CAISO has given 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 CAISO Balancing Authority Area, it may terminate this Agreement, on giving the CAISO ninety (90) days advance written notice.
- **3.2.3 Termination or Extension of Pilot.** The CAISO is currently in the process of establishing formal, generally applicable policies for Pseudo Generating Units for dynamic functionality to allow the submittal of Self-Schedules and Bids for Energy and Ancillary Services to the CAISO through a Scheduling Coordinator dynamically from a Pseudo-Tie into the CAISO Balancing Authority Area from the Native Balancing Authority Area. These prospective CAISO policies when effectuated in the CAISO Tariff, will apply to this currently implemented functionality with this Pseudo Generating Unit, as well as to any other future similarly situated external suppliers that may desire to implement similar arrangements. Accordingly, this Agreement shall extend until the CAISO Tariff, and this Agreement shall terminate and shall be superseded by the Pseudo-Tie provisions of the CAISO Tariff as soon as practical following the implementation of the Pseudo-Tie provisions of the CAISO Tariff. Should FERC not accept the Pseudo-Tie provisions of the CAISO Tariff as filed by the CAISO, the CAISO



reserves the right to terminate this Agreement by giving ninety (90) days advance written notice of termination.

3.2.4 Filing. With respect to any notice of termination given pursuant to this Section 3.2, the CAISO must file a timely notice of termination with FERC. The filing of the notice of termination by the CAISO 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 CAISO 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 established under this Agreement shall be implemented and operated in accordance with this Agreement, applicable provisions of the CAISO Tariff and the Interconnected Control Area Operating Agreement between the CAISO and the Salt River Project Agricultural Improvement and Power District ("SRP") (the Pseudo Generating Unit's Native Balancing Authority Area), and all applicable NERC and WECC Reliability Standards, 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 CAISO may agree, at its sole discretion, to change the CAISO Intertie association, subject to any limitations set forth in Schedule 2.
- **4.1.3** The terms and conditions for the Pseudo Generating Unit pilot implemented between the CAISO and the Pseudo Participating Generator for the Pseudo-Tie to the CAISO Balancing Authority 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 CAISO of the proposed changes. Pursuant to Sections 8.9 and 8.10 of the CAISO Tariff, the CAISO may verify, inspect and test the capacity and operating characteristics provided in the revised Schedule 1. The CAISO shall post on the CAISO Website a schedule showing, for at least one year in advance: (i) the proposed dates on which the CAISO's Master File will be updated, which dates shall occur at least every three months; (ii) the dates on which the information



contained in the revised Master File will become effective; and (iii) the deadlines by which changed technical information must be submitted to the CAISO in order to be tested and included in the next scheduled update of the CAISO's Master File. 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 CAISO's Master File, provided the Pseudo Participating Generator submits the changed information by the applicable deadline and is tested by the deadline. Subject to such notification this Agreement shall not apply to any generating unit identified in Schedule 1 which the Pseudo Participating Generator no longer owns or no longer has contractual entitlement to.

4.2 Agreement Subject to CAISO Tariff. The Parties will comply with all applicable provisions of the CAISO Tariff. This Agreement shall be subject to the CAISO 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 CAISO that it has the capability to provide that service in accordance with the CAISO Tariff and that it will comply with CAISO Dispatch Instructions for the provision of the service in accordance with the CAISO Tariff.
- **4.3.2 Certification.** The Pseudo Participating Generator shall not use a Scheduling Coordinator to submit a Bid for the provision of an Ancillary Service or submit a Submission to Self-Provide an Ancillary Service unless the Scheduling Coordinator serving that Pseudo Participating Generator is in possession of a current certificate pursuant to Sections 8.3.4 and 8.4 of the CAISO 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 CAISO may reasonably request in relation to major incidents, in accordance with Section 4.6.7.3 of the CAISO 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 CAISO Balancing Authority Area. No penalties or sanctions may be imposed under this Agreement



unless a Schedule or CAISO Tariff provision providing for such penalties or sanctions has first been filed with and made effective by FERC. Nothing in the Agreement, with the exception of the provisions relating to the CAISO ADR Procedures, shall be construed as waiving the rights of the Pseudo Participating Generator to oppose or protest any penalty proposed by the CAISO to the FERC or the specific imposition by the CAISO of any FERC-approved penalty on the Pseudo Participating Generator.

5.2 Corrective Measures. If the Pseudo Participating Generator fails to meet or maintain the requirements set forth in this Agreement and/or the CAISO Tariff, the CAISO shall be permitted to take any of the measures, contained or referenced in the CAISO Tariff, which the CAISO deems to be necessary to correct the situation.

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 CAISO ADR Procedures set forth in Section 13 of the CAISO Tariff, which is incorporated by reference, except that any reference in Section 13 of the CAISO Tariff to Market Participants shall be read as a reference to the Pseudo Participating Generator and references to the CAISO 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 CAISO Tariff will apply to liability arising under this Agreement, except that all references in Section 14 of the CAISO Tariff to Market Participants shall be read as references to the Pseudo Participating Generator and references to the CAISO Tariff shall be read as references to this Agreement.

ARTICLE X UNCONTROLLABLE FORCES

10.1 Uncontrollable Forces Tariff Provisions. Section 14.1 of the CAISO Tariff shall be incorporated by reference into this Agreement except that all references in Section 14.1 of the CAISO Tariff to Market Participants shall be read as a reference to the Pseudo Participating Generator and references to the CAISO 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 22.2 of the CAISO 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. Notwithstanding the foregoing, the Pseudo Participating Generator may, without the consent of the CAISO, transfer or assign this Agreement to any of its affiliates under common control with the Pseudo Participating Generator in connection with a transfer of the Pseudo Generating Unit to such affiliate, provided that (i) the Pseudo Participating Generator provides the CAISO with at least thirty (30) days' prior notice of any such transfer or assignment, (ii) such affiliate shall assume all of the payment and performance obligations of the Pseudo Participating Generator under this Agreement including any amounts due from the Pseudo Participating Generator and the obligation to cure any defaults hereunder by the Pseudo Participating Generator that occurred prior to the date of assignment, (iii) the Pseudo Participating Generator provides to the CAISO a copy of the agreement(s) documenting the assignment of this Agreement by the Pseudo Participating Generator to its affiliate and the affiliate's assumption thereof in accordance with the requirements of this Section 11.1, and (iv) the affiliate has



an equal or greater credit rating in order to assure that obligations of the Pseudo Participating Generator are satisfied. In connection with an assignment or transfer of this Agreement to such affiliate and the assumption of all the payment and performance obligations by such affiliate, the assigning Pseudo Participating Generator shall not be relieved of any obligation or liability under this Agreement arising or accruing due prior to the date of the assignment as required under the CAISO Tariff Section 22.2.

- **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 22.4 of the CAISO Tariff, provided that all references in Section 22.4 of the CAISO Tariff to Market Participants shall be read as a reference to the Pseudo Participating Generator and references to the CAISO Tariff shall be read as references to this Agreement, and unless otherwise stated or agreed shall be made to the representative of the other Party indicated in Schedule 3. 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 consent that any legal action or proceeding arising under or relating to this Agreement to which the CAISO 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 22.9 of the CAISO Tariff as if the references to the CAISO 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 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 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 the Pseudo Participating Generator 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.
- **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

By:	
Name	:
Title:	
Date:	

Mesquite Solar 1, LLC

By:	
Name	
Title:	
Date:	



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

By:	GG22	CO
Name:	Steve Berberich Vice President &	
Title:	Chief Operating Officer	
Date:	May 12, 2011	

Mesquite Solar 1, LLC

By:	
Name	
Title:	
Date:	



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

By:	
Name	:
Title:	
Date:	

Mesquite Solar 1, LLC

By: _	Vosed HRowlay
Name:_	Joseph H. Rowley
Title: _	Vice President
Date: _	May 11, 2011

SCHEDULE 1

Section 1: Technical Characteristics of Pseudo Participating Generator Units Mesquite Solar 1, LLC

Name of Facility (Including Unit Number)	QF (Y/N)	Name of Generating Unit Owner	CAISO Resource ID	Type of Unit	Primary Fuel Type	Designed Gross (Nameplate) Capacity (MW)	Limitations (Reference #)
Mesquite Solar 1	<u>N</u>	Mesquite Solar 1, LLC	MSQUIT_2_SOLAR	Photovoltaic	Solar	175 MW	N/A
	····	•••••••••••••••••••••••••••••••••••••••					
					1		
					1		
	•••••						
					<u> </u>		
					Ι	1	
						++	
	••••						
		L		1	L		

1/ Current effective values for purposes of submitting Self-Schedules and Bids for Energy and/or Ancillary Services in the CAISO Markets may differ from those set forth in this Schedule 1, depending on the results of CAISO performance testing pursuant to Sections 8.9, 8.10 and Appendix K: Ancillary Services Requirements Protocol of the CAISO Tariff. This and other values are subject to certification by the CAISO in accordance with Section 4.3.2 of the Participating Generator Agreement and the CAISO Tariff. More detailed Generating Unit operating data must be provided at a time and in a format specified by the CAISO in response to CAISO requests pursuant to CAISO Tariff Sections 4.6.4 and 4.6.7.1 and 30.



SCHEDULE 2

PSEUDO GENERATING UNIT PILOT 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 CAISO Pseudo Generating Unit pilot, including procurement of applicable Balancing Authority services from the CAISO and the ability to engage in dynamic transfers of Energy and Ancillary Services to the CAISO Balancing Authority Area.

1. Consistency with NERC/WECC

- **1.1** Operation of Pseudo-Tie functionalities must comply with all applicable NERC and WECC Reliability Standards, policies, requirements, and guidelines regarding inter-Balancing Authority 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 scheduling of Pseudo-Tie functionalities must be consistent with the NERC Dynamic Transfer Reference Document, 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 Interchange Information, and Standard INT-004 Dynamic Interchange Transaction Modifications).

2. CAISO operating, technical, and business requirements

2.1 Operating

- 2.1.1 The CAISO has established and specified the location of the Pseudo-Tie between the CAISO Balancing Authority Area and the Native Balancing Authority Area. The LMP price at the PNode associated with that Pseudo-Tie will be used for Settlement of Energy and will include losses and Congestion components of the LMP to that Pseudo-Tie point.
- **2.1.2** The Pseudo Generating Unit must transfer dynamically its entire output of its real time Generation production into the CAISO Balancing Authority Area at the associated pre-determined CAISO Intertie (PV West Intertie).



- **2.1.3** The Pseudo Generating Unit will operate under the terms of the CAISO Tariff applicable to the Generating Units of Participating Generators in the CAISO Balancing Authority Area, including requirements to promptly follow CAISO Dispatch Instructions, Exceptional Dispatch Instructions, operating orders, and other instructions, without limitation, pursuant to Sections 7.6 and 7.7 of the CAISO Tariff and CAISO's Operating Procedure 7830: Mesquite Solar Pilot Pseudo Tie Generating Unit, which is incorporated by reference, particularly in the event of an overload condition at the associated pre-determined CAISO Intertie (PV West Intertie).
- **2.1.4** The Pseudo Participating Generator shall demonstrate full deliverability of its maximum output to the associated pre-determined CAISO Intertie (PV West Intertie).
- 2.1.5 Firm transmission in a form agreeable to the CAISO must be reserved for the Pseudo-Tie transfers into the CAISO Balancing Authority Area across the entire transmission path external to the CAISO Balancing Authority 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 CAISO will treat all dynamically transferred Pseudo-Tie Energy as internal CAISO Balancing Authority Area Generation (except that it will be subject to Congestion determined by the scheduling capacity of the associated predetermined CAISO Intertie (PV West Intertie)) and will procure, or ensure self-provision of, required Operating Reserves for the CAISO Balancing Authority Area Loads served by Pseudo Generating Units.
- **2.1.8** All dynamic Energy transfers from the Pseudo-Tie associated with CAISO procurement of Spinning Reserve and Non-Spinning Reserve from Pseudo Generating Units will be afforded similar treatment (i.e., treatment as internal CAISO Balancing Authority Area Generation, except that it will be subject to Congestion determined by the scheduling capacity of the associated predetermined CAISO Intertie (PV West Intertie)).
- 2.1.9 As the Pseudo Generating Unit is an Eligible Intermittent Resource, all Maintenance and Forced Outages must be reported pursuant to CAISO Tariff Section 9. In case the Pseudo Generating Unit is curtailed or forced out of service in real time, the associated Scheduled Generation must be adjusted initially through the submittal of an Outage notification in accordance with Section 9 of the CAISO Tariff and subsequently by the submittal of revised Bids in the next available Real-Time Market (RTM).



- 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 scheduled output for the respective hour. Off system sales shall be treated as a firm fixed static export from the CAISO Balancing Authority Area.
- **2.1.11** In real-time, the total output of the Pseudo Generating Unit shall be telemetered to the CAISO. As the Pseudo Participating Generator is an Eligible Intermittent Resource, telemetered data to the CAISO shall include appropriate operational data, meteorological data, and other data reasonably necessary to forecast Energy as specified in Section 2.2.6 of this Schedule 2.
- **2.1.12** The CAISO will apply a Forecast Fee to the Pseudo Participating Generator for its Pseudo Generating Unit as an Eligible Intermittent Resource. The initial rate for the Forecast Fee, and all subsequent rate changes as may be necessary from time to time to recover costs incurred by the CAISO to produce forecasts for the Pseudo Generating Unit, shall not exceed the amount specified in CAISO Tariff Appendix F, Schedule 4.
- 2.1.13 The Real-Time dynamic transfer from the Pseudo-Tie should not exceed the final CAISO Market Schedules for the Pseudo Generating Unit for each Operating Hour. In the event that the actual Real-Time dynamic transfer value for the Pseudo Generating Unit exceeds the final CAISO Market Schedules, the Pseudo Generating Unit may be subject to curtailment through the CAISO's Real-Time Dispatch Instructions. In the event that the Pseudo Generating Unit's output creates an imminent reliability issue on the associated pre-determined CAISO Intertie (PV West Intertie), the Pseudo Generating Unit may also be curtailed whenever its Generation output, less any off-system sales, is greater than the associated transmission reservation pursuant to Section 2.1.5 of this Schedule 2.
- 2.1.14 The CAISO may, at its discretion, either limit or forego procuring any or all Ancillary Services at the particular pre-determined CAISO Intertie (PV West Intertie) to ensure that Operating Reserves are adequately dispersed throughout the CAISO Balancing Authority Area and its Interties as required by the WECC.
- 2.1.15 Unless a particular service is procured by the Pseudo Participating Generator from some other source, the CAISO shall provide to the Pseudo Generating Unit all Balancing Authority services available to other Generating Units in the CAISO Balancing Authority Area, which may include the auxiliary load needs of the Pseudo Generating Unit, provided firm transmission service is reserved across the transmission path from the CAISO Intertie to the Pseudo-Tie.



2.1.16 The CAISO and SRP will develop a coordinated operating procedure to facilitate the continued delivery of Energy and Ancillary Services from the Pseudo Generating Unit 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 CAISO, and the Pseudo Generating Unit's Native Balancing Authority Area regarding generating units and inter-Balancing Authority Area Interties must be satisfied.
- **2.2.2** Proper incorporation of the dynamic signal into all involved Balancing Authority Areas' ACE equations will be required.
- **2.2.3** If there is no Scheduled Generation in the DAM, HASP or Real-Time markets, the Pseudo Generating Unit shall not generate except when issued an Exceptional Dispatch from the CAISO.
- **2.2.4** If the Pseudo Participating Generator desires to participate in CAISO's Regulation market, all provisions of the CAISO's Standards for Imports of Regulation or any successor CAISO standards regarding the technical arrangements for Regulation posted on the CAISO Website shall apply.
- **2.2.5** As the Pseudo Generating Unit is an Eligible Intermittent Resource, it shall comply with all provisions associated with forecasting and data requirements specified in Sections 4 and 6 of CAISO Tariff Appendix Q (Eligible Intermittent Resources Protocol).
- **2.2.6** As the Pseudo Generating Unit is an Eligible Intermittent Resource that is a solar photovoltaic (PV) resource, it must meet additional data requirements pursuant to Section 2.2.5 of this Schedule 2, including but not limited to irradiance measurements (Direct at angle of array), ambient temperature at the average array height, back panel temperature for PV type arrays at the average array height, barometric pressure, and wind speed and direction at the average array height, which will be recorded in 4 second intervals.

2.3 Business

2.3.1 Energy delivered from a Pseudo Generating Unit will be subject to all provisions of the CAISO Tariff regarding Imbalance Energy, including Uninstructed Deviation Penalties (UDP) (just as is the case with all other CAISO intra-Balancing Authority Area Generating Units of Participating Generators).



- **2.3.2** All Ancillary Services delivered from a Pseudo Generating Unit will be subject to the CAISO's compliance monitoring and remedies, just as any CAISO intra-Balancing Authority Area Generating Units of Participating Generators.
- **2.3.3** All DAM, HASP and RTM Bids from the Pseudo Generating Unit shall be subject to CAISO 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 settled based on the Generating Unit revenue meter value, and any static off-system sales represented as an export quantity will be deemed delivered at a Pseudo-Tie for that Operating Hour consistent with Section 2.1.10 of this Schedule 2.
- **2.3.5** All Energy from the Pseudo-Tie shall be subject to Marginal Losses 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-CAISO transmission system will remain the responsibility of the Pseudo Participating Generator.
- 2.3.7 The Pseudo Generating Unit must be permanently associated with a particular pre-determined CAISO Intertie (PV West Intertie). Any dynamic transfers of Energy, and/or Energy associated with Ancillary Services will be subject to Congestion mitigation at the associated pre-determined CAISO Intertie (PV West Intertie). The CAISO 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 CAISO 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 CAISO Balancing Authority Area must be certified by the CAISO prior to providing such services.
- **2.3.9** Only one dynamic transfer signal may be associated with any Pseudo Generating Unit.
- 2.3.10 Should there be any need or requirement, whether operational or procedural, for the CAISO to make real time adjustments to the CAISO's inter-Balancing Authority Area Interchange Schedules at the pre-determined CAISO Intertie (PV West 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 CAISO Interchange Schedule at that pre-determined CAISO Intertie (PV West Intertie).



- **2.3.11** The Pseudo Generating Unit shall be subject to CAISO 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 CAISO Tariff in all applicable CAISO Markets.
- 2.3.13 The CAISO shall assess charges to the Scheduling Coordinator for the Pseudo Participating Generator on the same basis as they apply to any other CAISO intra-Balancing Authority Area Generating Unit supplying 100% of its output to the CAISO, subject to the provisions of this Section 2.3.13. Any off-system sales of Energy shall be subject to all export charges except the Wheeling Access Charge (WAC). A special export market Resource ID is required for this purpose for which the Pseudo Participating Generator shall provide ninety (90) days advance notice prior to implementation.
- **2.3.13.1** Any transfers from the Pseudo Generating Unit scheduled into the CAISO Balancing Authority Area shall be subject to CAISO charges associated with the DAM, HASP and real time Congestion mitigation at the associated pre-determined CAISO Intertie (PV West Intertie) (just as any other static or dynamic CAISO Balancing Authority Area Interchange Schedule at that pre-determined CAISO Intertie (PV West Intertie)).
- **2.3.13.2** Uninstructed Imbalance Energy charges shall apply only to the deviations between (i) the Scheduled Generation, plus any Instructed Imbalance Energy, and (ii) the metered Generation from the Pseudo Generating Unit.
- **2.3.13.3** The Grid Management Charge shall be assessed to the Scheduled Generation 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 CAISO Tariff applicable to the CAISO Markets, which may change from time to time, for which the CAISO will develop revisions to the terms applicable to Pseudo-Ties as necessary.

3. Operating Agreements

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



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



SCHEDULE 3

NOTICES [Section 11.2]

Pseudo Participating Generator

Name of Primary Representative:	Jennifer Allyn
Title:	Senior Contracts Administrator
Company:	Sempra Generation
Address:	101 Ash Street, HQ13C
City/State/Zip Code	San Diego, CA 92101-3017
Email Address:	JAllyn@SempraGeneration.com
Phone:	(619) 696-2925
Fax No:	(619) 696-1805
Name of Alternative	

Representative:	Emily Shults
Title:	Director – Gas & Power Trading
Company:	Sempra Generation
Address:	101 Ash Street, HQ13C
City/State/Zip Code	San Diego, CA 92101-3017
Email Address:	EShults@SempraGeneration.com
Phone:	(619) 696-2240
Fax No:	(619) 696-1805



CAISO

Name of Primary Representative:	Ms. Roni Reese
Title:	Senior Contracts Analyst
Address:	250 Outcropping Way
City/State/Zip Code	Folsom, CA 95630
Email Address:	rreese@caiso.com
Phone:	(916) 608-7027
Fax No:	(916) 608-7292
Name of Alternative Representative:	Ms. Daune Kirrene
Title:	Senior Contracts Negotiator
Address:	250 Outcropping Way
City/State/Zip Code	Folsom, CA 95630

Email Address: dkirrene@caiso.com

Phone: (916) 608-7058

Fax No: (916) 608-5066