

September 30, 2013

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

**Re: California Independent System Operator Corporation
Docket No. ER13-____-000**

**ISO Service Agreement No. 2894, Large Generator
Interconnection Agreement**

**Notice of Termination of Pilot Pseudo-Tie Participating
Generator Agreement, ISO Service Agreement No. 1983**

Dear Secretary Bose:

The California Independent System Operator Corporation (“ISO”) submits for filing and acceptance an executed Large Generator Interconnection Agreement (“LGIA”), to be made effective on January 1, 2014, between the ISO, San Diego Gas & Electric Company (“SDG&E”) and Mesquite Solar 1, LLC (“Mesquite Solar”).¹ The Mesquite Solar LGIA is a non-conforming LGIA, which provides for the interconnection of the 165 MW solar photovoltaic generating facility located near Arlington, Arizona owned by Mesquite Solar.²

¹ This filing is submitted pursuant to Section 205 of the Federal Power Act (“FPA”), 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 (2008).

² Mesquite Solar is a participant in the U.S. Department of Energy (DOE) Loan Guarantee program, under Section 1703 of Title XVII of the EAct of 2005 (42 U.S.C § 16513 (2013)) and under Section 1705 of EAct of 2005 (42 U.S.C § 16516 (2013)), as amended by the American Recovery and Reinvestment Act of 2009. Pub. L. No. 111-5, 123 Stat. 115 (Feb. 17, 2009). The program is designed to support the financing of innovative clean energy technologies. The full output of the generating facility is committed to Pacific Gas and Electric Company pursuant to a long-term power purchase agreement. California Public Utilities Commission Resolution E-4393 (Apr. 15, 2011).

The Mesquite Solar LGIA includes certain provisions to reflect the ISO's discussions with Salt River Project Agricultural Improvement and Power District ("SRP"), the operator of a balancing authority area ("BAA") adjacent to the ISO.³ These discussions and the associated provisions of the Mesquite Solar LGIA account for the unique nature of the generating facility's interconnection and are detailed below.

In addition, the ISO hereby notices termination of a Pilot Pseudo-Tie Participating Generator Agreement between the ISO and Mesquite Solar, effective February 14, 2012. This agreement was replaced by a *pro forma* Pseudo-Tie Participating Generator Agreement, ISO Service Agreement No. 2905, on that date.

I. Background and Description of Filing

A. Initial Interconnection Request and Subsequent Project Downsizing

Mesquite Solar submitted an interconnection request in July 2010 for the generation project, identified as Queue Position #643T ("Q643T") in the ISO's generator interconnection queue.⁴ Mesquite Solar subsequently submitted a request to downsize the net output of the facility to 165 MW in accordance with the ISO Tariff Appendix GG.⁵ This request was accepted pursuant to the Generator Downsizing Study Report: Area Report in the San Diego Gas & Electric's System, issued on July 8, 2013.

B. Facility Interconnection and Deliverability Requirements

Mesquite Solar has an existing interconnection comprised of two 500 kV generation tie lines between the Hassayampa Switchyard and the Mesquite 230/500 kV Switchyard.⁶ Together, the Hassayampa Switchyard, Palo Verde

³ SDG&E is also submitting a certificate of concurrence with this Mesquite Solar LGIA as a service agreement under its transmission owner tariff. The ISO requests that this filing be consolidated with SDG&E's filing of this same agreement, designated by SDG&E as Service Agreement No. 35 under its transmission owner tariff. Consolidation is appropriate because both filings relate to the same underlying contract, and therefore involve the same issues. Consolidating the filings will avoid the need for entities that wish to intervene or comment on the Mesquite Solar LGIA to file in separate dockets.

⁴ Sempra Generation submitted the original interconnection request, which it has since assigned to Mesquite Solar.

⁵ See *California Independent System Operator Corporation*, 141 FERC ¶ 61,219 (2012).

⁶ See the Mesquite Solar ANPP Hassayampa Switchyard Interconnection Agreement ("HIA") Amendment No. 1 to Arizona Public Service Co. Service Agreement No. 193, Docket No. ER11-3667-000 (Letter Order dated Oct. 11, 2011). The HIA was further amended in 2013. See HIA Amendment No. 2 to Arizona Public Service Co. Service Agreement No. 193, Docket No. ER13-1328-000, Letter Order dated Jun. 18, 2013 (accepting HIA amendment reflecting shared ownership of Mesquite 230/500 kV Switchyard and 500 kV generation tie lines).

Switchyard, and three bus ties between the two switchyards form the Common Bus at Palo Verde.⁷ Two 500 kV transmission lines under ISO operational control are connected to the Common Bus: the Hassayampa-Hoodoo Wash line and the Palo Verde-Devers line.

The Mesquite Solar generating facility is currently participating in the ISO markets as a pseudo-tie resource.⁸ As a pseudo-tie resource and because the Hassayampa Switchyard is under SRP's operational control, the ISO requires the generation schedules to be tagged with SRP as the native balancing authority area. Consequently, this arrangement prevents the capacity from being considered as deliverable for purposes of counting for resource adequacy purposes in the same manner as resources located within the ISO balancing authority area.⁹

Concurrent with the ISO interconnection process, Mesquite Solar engaged in discussions with representatives of the ISO and SRP to find a solution that would allow the generating facility to obtain full capacity deliverability status utilizing the facility's existing connection to the Hassayampa Switchyard.¹⁰ As a result, Mesquite Solar, SRP, and the ISO considered several options that could be pursued to achieve the Mesquite Solar's deliverability objective. These discussions led ultimately to the awareness that the Common Bus Arrangement

7

See "Funding Agreement for the Development of a Satellite Switchyard to the ANPP High Voltage Switchyard between Participating Interconnectors and Salt River Project Agricultural Improvement and Power District" ("Funding Agreement"), Docket No. ER00-3752-000 (Letter Order dated Oct. 22, 2001); and ANPP Hassayampa Switchyard Interconnection Agreement (transmittal letter at p. 4), Docket No. ER01-2994 (Letter Order dated Oct. 22, 2001).

8

Docket No. ER11-4732-000, Letter Order dated Nov. 2, 2011 (accepting Mesquite Solar Pilot Pseudo-Participating Generator Agreement ("Pilot Agreement")). This Pilot Agreement was subsequently superseded by the ISO's pro forma pseudo-participating generator agreement, accepted for filing in Docket No. ER11-4161-000. *California Independent System Operator Corporation*, 136 FERC ¶ 61,239 (2011). See also, CAISO Tariff Appendix N and Appendix B.16 (containing the pseudo-tie protocols and pro forma Pseudo-Tie Participating Generator Agreement, respectively).

9

See CAISO Tariff, section 40.8.1.12.1 (requiring that a pseudo-tie be allocated a portion of the import capacity at the scheduling point equal to the resource adequacy capacity). Full capacity deliverability status is available to resources located within the ISO balancing authority area. See CAISO Tariff, Appendix Y (providing procedures for interconnection customers to request full capacity deliverability status).

10

The Hassayampa Switchyard is jointly owned by the Arizona Nuclear Power Project ("ANPP") Switchyard Participants, consisting of Arizona Public Service Company ("APS"), The City Of Los Angeles By And Through The Department of Water And Power, El Paso Electric Company, Public Service Company of New Mexico, Salt River Project Agricultural Improvement and Power District ("SRP"), Southern California Public Power Authority, and Southern California Edison ("SCE"), with SRP serving as operating agent on behalf of the ANPP Switchyard Participants. The ANPP Hassayampa Switchyard Interconnection Agreement must be executed by any generator interconnected to the Hassayampa Switchyard.

could facilitate a solution without the need to construct additional interconnection facilities.

C. Common Bus Arrangement

As explained below, the ISO and SRP have concluded that the existing Common Bus Arrangement permits the ISO to receive the power output of Mesquite Solar or other similarly situated generating facilities without requiring tagging. This conclusion is supported by Section 4.12 of the ANPP Hassayampa Switchyard Interconnection Agreement, which provides for the “delivery, sale, purchase, receipt and/or exchange of power and energy at any point within the Common Bus without a transmission charge, transmission credit, reservation, or schedule for transactions or any portions thereof conducted within the Common Bus.”¹¹ The ISO and SRP are in agreement that the Common Bus Arrangement is compliant with the reliability standards by allowing for the power output of a resource interconnected at the Hassayampa Switchyard to originate in the ISO BAA and, although crossing the SRP-ISO tie as it enters and leaves the Common Bus, no tagging is required.¹² A graphical representation of this arrangement is included as Attachment B to this filing for informational purposes.

SRP confirmed the mutual understanding that SRP and the ISO have reached regarding the opportunity for generation connected at the Hassayampa Switchyard to qualify as a System Resource in the portfolios of ISO load-serving entities by letter dated June 12, 2013.¹³ The SRP Letter provides that, with proper metering, deliveries from such generating facilities are effectively within the ISO balancing authority area and are not required to be tagged unless exported from the ISO balancing authority area.¹⁴ Thus, the Common Bus Arrangement enables the generating facility to be interconnected with the ISO balancing authority area under the Mesquite Solar LGIA and meet Mesquite Solar’s deliverability objective, while avoiding the cost and delay associated with

¹¹ See Funding Agreement, Docket No. ER00-3752-000 (Letter Order dated Oct. 22, 2001); and ANPP Hassayampa Switchyard Interconnection Agreement (transmittal letter at p. 4), Docket No. ER01-2994 (Letter Order dated Oct. 22, 2001). See also, *Arizona Public Service Co., et al.*, 96 FERC ¶ 61,156 (2001).

¹² See SRP letter dated June 12, 2013, “Contiguity of Mesquite Solar 1 and the CAISO BAA” (“SRP Letter”), included as Exhibit 1 to Appendix A of the Mesquite Solar LGIA, and also included as Attachment C to this transmittal letter for convenience.

¹³ The ISO notes that similarly-situated resources interconnected at the Hassayampa Switchyard (*i.e.*, generators that have executed the ANPP Hassayampa Switchyard Interconnection Agreement as required by the ANPP Switchyard Participants, and that have also been processed for interconnection to the ISO BAA through the ISO generator interconnection procedures) will be eligible to receive the same treatment. See also SRP Letter at p. 2.

¹⁴ In the case of Mesquite Solar, the existing metering arrangement (which includes ISO revenue quality meters) will serve as the requisite “proper metering” noted in the SRP Letter, but its designation as a pseudo-tie will cease on the effective date of the Mesquite Solar LGIA.

the construction of a new 500 kV switchyard that would otherwise be required.¹⁵ The ISO and SRP discussed this arrangement with Western Electricity Coordinating Council's compliance group, and confirmed with the reliability coordinator that the Common Bus Arrangement supported this conclusion. In advance of the Mesquite Solar LGIA effective date, SRP and the ISO will provide additional outreach to the owners and other interconnected users of the Common Bus.¹⁶

Historically, achieving such resource transitions has been made possible by realigning metering points and/or new construction to re-delineate the boundary between balancing authorities present at the interconnection point.¹⁷ Two additional options along these lines were considered but ultimately rejected by the ANPP Switchyard Participants, including realignment of metering points within the Hassayampa Switchyard or extending the Hassayampa Switchyard bus to include facilities under the ISO's operational control.

A third option, which was directly implicated by the interconnection request, would be the construction of a new ISO-controlled 500 kV switchyard immediately adjacent to the Hassayampa Switchyard. Such a new 500 kV switchyard would be located inside the ISO's balancing authority area by looping in the Hassayampa-Hoodoo Wash line, and the interconnection facility's existing 500 kV gen-ties would be connected to the new 500 kV switchyard. The ANPP Switchyard Participants regarded construction of a new 500 kV switchyard as unnecessary, taking the view that the existing Common Bus Arrangement (as defined in the ANPP Hassayampa Switchyard Interconnection Agreement) already provided means for meeting Mesquite Solar's deliverability objective. Mesquite Solar would nonetheless be entitled under the ISO's interconnection procedures to pursue this option and be repaid the network upgrade costs by ISO customers. Considering the cost of constructing a new 500kV switchyard whose only purpose would be to effectuate an ISO balancing authority area transmission interconnection for Mesquite Solar, all parties considered the new

¹⁵ As noted in the SRP Letter, the ISO and SRP will work to amend the ISO-SRP interconnected operating agreement to reflect the existence of the ANPP Hassayampa Switchyard Interconnection Agreement and accurately represent the Palo Verde/Hassayampa Switchyards and the 500 kV lines that are in the ISO's BAA. SRP Letter at p. 2.

¹⁶ Mesquite Solar will remain a party to the HIA, inasmuch as that agreement will continue to address the parties' respective obligations associated with the physical interconnection facilities at the Hassayampa Switchyard, whereas the Mesquite Solar LGIA will govern the operation of the generating facility within the ISO balancing authority area. See, e.g., Mesquite Solar LGIA at Appendix D.2.

¹⁷ See e.g., Amendment No. 5 to an Interconnected Control Area Operating Agreement ("ICAOA") with Nevada Power Company, Docket No. ER12-1897-000 (Letter Order dated July 5, 2012) (accepting ICAOA amendment reflecting a revised balancing authority area boundary due to physical reconfiguration of facilities at the Merchant switchyard and the resulting transition of the Desert Star Energy Center).

switchyard interconnection option uneconomic and potentially unnecessary given the adjacent interconnection facilities in the Hassayampa Switchyard.

D. Participating TO and Affected Participating TO

SDG&E is identified as the participating transmission owner in the Mesquite Solar LGIA. This results from an arrangement documented in an exhibit to the Funding Agreement: a Memorandum of Understanding (“MOU”) between APS, SDG&E, Imperial Irrigation District, and SRP,¹⁸ as specified in the Transmission Control Agreement, Appendix A.2: SDG&E’s Contract Entitlements.¹⁹ The MOU provides that SDG&E retains ownership and control over the facilities associated with the loop-in of the then-existing Palo Verde-North Gila line into Hassayampa (resulting in the Hassayampa-North Gila line, later becoming the Hassayampa-Hoodoo Wash line) so as to ensure the unobstructed transfer of capacity and energy through Hassayampa equal to the capability of the Palo Verde-North Gila line. Accordingly, SDG&E is the participating transmission owner for this Mesquite Solar LGIA through its entitlement to the Palo Verde-North Gila line as set forth in the Transmission Control Agreement.

During the interconnection study process, SCE was identified in the ISO Cluster 3 and Cluster 4 Phase II Interconnection Study Report as an affected participating transmission owner. In accordance with ISO Tariff, Appendix Y, Section 11.1.2, a separate Affected Participating Transmission Owner Upgrades Facilities Agreement (“UFA”) among Mesquite Solar, ISO, and SCE will govern the parties’ respective obligations regarding the Network Upgrades identified for the SCE area in the Appendix A – Q643T Generator Downsizing Study Report issued on July 8, 2013 (“Downsizing Study Report”). The UFA will be separately filed with the Commission for acceptance pursuant to section 205 of the FPA once it has been executed.

II. Description of Relevant Mesquite Solar LGIA Provisions

In Order No. 2003²⁰ and subsequent decisions, the Commission has recognized that there would be a number of interconnections where “reliability concerns, novel legal issues or other unique factors would justify the filing of a

¹⁸ See Exhibit 5 to the Funding Agreement, Docket No. ER00-3752-000.

¹⁹ *California Independent System Operator Corporation*, 139 FERC ¶ 61,198 (2012).

²⁰ *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, FERC Stats. & Regs. ¶ 31,146 (2003), *on reh’g*, Order No. 2003-A, FERC Stats. & Regs. ¶ 31,160 (2004), *on reh’g*, Order No. 2003-B, FERC Stats. & Regs. ¶ 31,171 (2004), *on reh’g*, Order No. 2003-C, FERC Stats. & Regs. ¶ 31,190 (2005), *aff’d sub nom. Nat’l Ass’n of Regulatory Util. Comm’rs v. FERC*, 475 F.3d 1277 (D.C. Cir. 2007).

non-conforming agreement.”²¹ The Commission has further explained that it would analyze the proposed variations from a transmission provider’s pro forma LGIA under the “consistent with or superior to” standard in order to “ensure that operational or other reasons necessitate the non-conforming agreement”.²²

The Mesquite Solar LGIA contains certain terms that do not appear in the pro forma ISO LGIA. These limited deviations from the pro forma LGIA are necessary to account for the fact that Mesquite Solar generating facility, while it is to be treated in all respects as an ISO controlled grid interconnected resource due to the above-described Common Bus Arrangement and within the ISO balancing authority area, remains physically interconnected to the Hassayampa Switchyard. Given the unique nature of the interconnection, the ISO submits that the following changes to the ISO’s pro forma LGIA meet the Commission’s “consistent with or superior to” standard relating to deviations from the pro forma LGIA.

A. Mesquite Solar LGIA Defined Terms

Article 1 of the pro forma LGIA contains the defined terms that are not otherwise included in the ISO’s tariff. The new or revised terms contained in the Mesquite Solar LGIA are necessary to account for the existing contractual arrangements pertaining to the Hassayampa Switchyard, which are referenced in the Mesquite Solar LGIA Appendices and describe the details of the generating facility’s interconnection.

The newly-defined terms included as part of the Mesquite Solar LGIA are: (i) ANPP Hassayampa Switchyard Interconnection Agreement; (ii) ANPP Switchyard Participants; (iii) Hassayampa Switchyard; and (iv) Interconnection Customer. In the case of each of the foregoing terms, the additional definitions were necessary in order to adequately reference the existing contractual arrangements unique to the Mesquite Solar’s generating facility and the Common Bus Arrangement, as set forth in the Mesquite Solar LGIA Appendices.

Article 1 also contains certain definitions that, while appearing in the pro forma LGIA, are revised in this Mesquite Solar LGIA. The revised definitions consist of: (i) Interconnection Customer’s Interconnection Facilities; (ii) Interconnection Facilities; (iii) Interconnection Service; (iv) Participating TO’s Reliability Network Upgrades; (v) Point of Change in Ownership; and (vi) Point of Interconnection. In each case, the foregoing definitions were revised to include the appropriate reference to the Hassayampa Switchyard as the location of the generating facility’s physical interconnection.

²¹ See, e.g., *PJM Interconnection, LLC*, 111 FERC ¶ 61,098 at P 8 (2005).

²² *Id.* at P 9.

B. Mesquite Solar LGIA Section 5.19.4

Section 5.19.4 of the Mesquite Solar LGIA provides the right to a 5 percent permitted reduction in the output capacity. The pro forma LGIA provides that the measure for the 5 percent reduction is to be based on the information submitted as part of the Phase II study process. As noted in paragraph I.A. of this transmittal letter, Mesquite Solar downsized the original interconnection request pursuant to the ISO tariff. Accordingly, the ISO has clarified section 5.19.4 of the Mesquite Solar LGIA to reflect that the 5 percent measure for purposes of any subsequent permitted reduction will be based on the 165 MW output capacity, as reflected in the downsizing request.

III. Notice of Termination of the Pilot Pseudo-Tie Participating Generator Agreement

On September 30, 2011, the ISO filed a Pilot Pseudo-Tie Participating Generator Agreement between the ISO and Mesquite Solar ("Pilot Agreement"). This agreement was accepted by Commission letter order in ER11-4732-000 dated November 2, 2011. The Pilot Agreement established the terms under which Mesquite Solar participated in the ISO markets as a pseudo-tie, effective November 1, 2011, which was contemporaneous with the dynamic transfer provisions of the ISO tariff being accepted by the Commission.²³ These tariff provisions included a pro forma Pseudo-Tie Participating Generator Agreement intended to supersede the Pilot Agreement.²⁴ Mesquite Solar entered into a pro forma Pseudo-Tie Participating Generator Agreement, ISO Service Agreement No. 2905, which was made effective on February 14, 2012. This agreement replaced the underlying pilot agreement consistent with the provisions of the ISO tariff. Accordingly, the ISO now requests termination of the Pilot Agreement effective February 14, 2012 to clear up the record. The pro forma Pseudo-Tie Participating Generator Agreement will remain in effect until the Mesquite Solar LGIA is accepted by the Commission, at which time a Mesquite Solar pro forma Participating Generator Agreement will be made effective.²⁵

IV. Mesquite Solar LGIA Effective Date

The ISO requests that the Mesquite Solar LGIA be made effective on January 1, 2014. Nonetheless, the ISO requests the Commission issue an order 61 days after the date of this filing to facilitate recognition of the Mesquite Solar

²³ See CAISO Tariff, Appendix N; and *California Independent System Operator Corporation*, 136 FERC ¶ 61,239 (Commission order dated September 30, 2011 accepting the ISO dynamic transfer amendment of the ISO tariff filed in FERC Docket No. ER11-4161-000).

²⁴ CAISO Tariff, Appendix B.16.

²⁵ ISO Service Agreement No. 2905 was made effective and will be terminated in accordance with the Commission's electronic quarterly reporting rules and procedures, as will the replacement pro forma Participating Generator Agreement.

generating facility in the ISO resource adequacy process prior to the requested effective date.

V. Attachments

In addition to this transmittal letter, the following documents support the instant filing:

- Attachment A: ISO Service Agreement No. 2984
- Attachment B: Diagram of Common Bus Understanding
- Attachment C: SRP Letter

VI. Service

Copies of this filing have been served upon PG&E, SDG&E, Mesquite Solar, SCE, SRP, the CPUC and the California Energy Commission. In addition, the filing has been posted on the ISO website.

VII. Correspondence

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

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

VIII. Conclusion

The ISO respectfully requests that the Commission accept this filing and permit the Mesquite Solar LGIA to be effective as of the date requested, and that the Commission accept notice of termination of the Pilot Agreement as of the date requested.

Respectfully submitted,

/s/ John Anders
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