FEDERAL ENERGY REGULATORY COMMISSION WASHINGTON, DC 20426

OFFICE OF ENERGY MARKET REGULATION

In Reply Refer To:
California Independent System
Operator Corporation
Docket Nos. ER17-114-000
ER17-114-001

January 12, 2017

California Independent System
Operator Corporation
Attn: Andrew Ulmer
Director, Federal Regulatory Affairs
250 Outcropping Way
Folsom, CA 95630

Reference: Compliance Filing for Order Nos. 827 and 828

Dear Mr. Ulmer:

On October 14, 2016, as amended October 17, 2016, California Independent System Operator Corporation (CAISO) filed tariff revisions to comply with Commission Order Nos. 827 and 828. Please be advised that additional information is necessary to process the filing. Please provide complete responses to the following:

1) Definition of Repowering Projects

On page six of the transmittal letter, CAISO states that "for interconnection customers making upgrades to their existing resources that do need to undergo an interconnection study process, the CAISO is proposing to treat these repowering

¹ See Reactive Power Requirements for Non-Synchronous Generation, Order No. 827, 81 Fed. Reg. 40,793 (June 23, 2016), FERC Stats. & Regs. ¶ 31,385 (2016), order on clarification and reh'g, 157 FERC ¶ 61,003 (2016) (Order No. 827 Rehearing); Requirements for Frequency and Voltage Ride Through Capability of Small Generating Facilities, Order No. 828, 81 Fed. Reg. 50,290 (Aug. 1, 2016), 156 FERC ¶ 61,062 (2016).

projects as newly interconnecting resources under the provisions of Order No. 827."

- **a.** Please define "repowering projects." Please explain how this definition is "sufficiently detailed and narrow to clearly define what constitutes a repowering of an existing generator *capable of providing reactive power*," consistent with the Order No. 827 Rehearing Order.²
- **b.** Is there a distinction in the CAISO tariff between an upgrade of a facility and a repowering of a facility? If so, please explain.
- **c.** Please explain how this definition of repowering projects is reflected in the proposed tariff revisions. Would all existing resources making upgrades that are required to undergo an interconnection study process pursuant to existing tariff Section 25 satisfy the definition of "repowering projects"?

2) Reactive Power Requirements for Upgrades

Under proposed CAISO tariff Section 25.4.1, "an existing Asynchronous Generating Facility making upgrades to its Generating Unit(s) that require a new Interconnection Request under Section 25 will provide reactive power capability as described in Section 25.4.1." Existing Section 25.1 provides that existing interconnection customers must submit a new interconnection request for:

(b) each existing Generating Unit connected to the CAISO Controlled Grid that will be modified with a resulting increase in the total capability of the power plant; (c) each existing Generating Unit connected to the CAISO Controlled Grid that will be modified without increasing the total capability of the power plant but has changed the electrical characteristics of the power plant such that its re-energization may violate Applicable Reliability Criteria; (d) each existing Generating Unit connected to the CAISO Controlled Grid whose total Generation was previously sold to a Participating TO or on-site customer but whose Generation, or any portion thereof, will now be sold in the wholesale market, subject to Section 25.1.2; and (e) each existing Generating Unit that is a Qualifying Facility and that is converting to a Participating Generator without repowering or reconfiguring the existing Generating Unit, subject to Section 25.1.2.

² Order No. 827 Rehearing, 157 FERC ¶ 61,003 at P 8.

- **a.** Under proposed Section 25.4.1, would an upgrade or repowering project be required to provide reactive power to support the generating capacity of its entire plant, or only provide reactive power for the incremental amount of new capacity that must undergo an interconnection study? Please explain how your response is reflected in the proposed tariff revisions. If necessary, please include separate responses for upgrades and repowerings.
- b. Please explain why requiring each type of resource described in existing Sections 25.1(b)-(e) to comply with the reactive power requirements of Order No. 827 is consistent with Order No. 827. Among other things, please explain why CAISO's proposal is consistent with the Commission's finding that the reactive power requirements of Order No. 827 do not apply to existing non-synchronous generators making upgrades that require new interconnection requests, absent a showing by the transmission provider's system impact study that provision of reactive power by that generator is necessary to ensure safety or reliability. If CAISO is seeking approval of the proposal under the independent entity variation standard, please justify your variations in light of Order No. 827, specifically related to concerns that older wind generators making upgrades to their facilities may face significant cost in providing reactive power.

This letter is issued pursuant to 18 C.F.R. § 375.307 (2016) and is interlocutory. This letter is not subject to rehearing under 18 C.F.R. § 385.713 (2016). A response to this letter must be filed with the Secretary of the Commission within 30 days of the date of this letter by making a deficiency filing in accordance with the Commission's electronic tariff requirements. In addition, submit an electronic version of your response to Franklin Jackson at Franklin.Jackson@ferc.gov. The information requested in this letter will constitute an amendment to your filing and a new filing date will be established. A notice will be issued upon receipt of your filing.

Pending receipt of the above information, a filing date will not be assigned to your

³ Order No. 827, FERC Stats. & Regs. ¶ 31,385 at PP 59, 65.

⁴ See Duke Power Co., 57 FERC ¶ 61,215, at 61,713 (1991) ("[T]he Commission will consider any amendment or supplemental filing filed after a utility's initial filing . . . to establish a new filing date for the filing in question").

filing. Failure to respond to this letter order within the time period specified may result in a further order rejecting your filing.

Sincerely,

Steve P. Rodgers, Director Division of Electric Power Regulation – West