## FEDERAL ENERGY REGULATORY COMMISSION WASHINGTON, D.C. 20426

## OFFICE OF ENERGY MARKET REGULATION

In Reply Refer To: California Independent System Operator Corp. Docket No. ER10-319-000

January 29, 2010

Nancy Saracino Michael Dozier Grant Rosenblum California Independent System Operator Corporation 151 Blue Ravine Road Folsom, CA 95630

Dear Ms. Saracino, Mr. Dozier and Mr. Rosenblum:

On November 25, 2009, pursuant to section 205 of the Federal Power Act (FPA), the California Independent System Operator Corporation (CAISO) filed proposed revisions to its open access transmission tariff (CAISO Tariff) to expand the scope of the data it receives from Eligible Intermittent Resources, which include generating units powered primarily by wind, solar energy and specific small hydroelectric facilities. The CAISO proposed two primary tariff changes. First, the CAISO proposed to revise CAISO Tariff sections 9.3.10.3 and 9.3.10.3.1 to reduce the threshold for reporting the forced outage of an Eligible Intermittent Resource with total capacity of greater than 10 MW from the current outage capacity level of 10 MW to 1 MW. Second, the CAISO proposed to revise CAISO Tariff Appendix Q, Eligible Intermittent Resources Protocol, to expand the scope of resources subject to the obligation to install specified forecasting and telemetry equipment and to communicate relevant data to the CAISO. Please be

<sup>&</sup>lt;sup>1</sup> 16 U.S.C. § 824d (2006).

<sup>&</sup>lt;sup>2</sup> The CAISO Tariff currently defines Eligible Intermittent Resource as "[a] Generating Unit that is powered by one of the following sources, except for a de minimis amount of Energy from other sources: 1) wind, 2) solar energy, or 3) hydroelectric potential derived from small conduit water distribution facilities that do not have storage capability." CAISO, FERC Electric Tariff, Fourth Replacement Volume No. II, Third Revised Sheet No. 861.

advised that the CAISO submittal is deficient and the following information is required before the Commission can process your filing.

- (1) Please provide justification for the CAISO's use of 1 MW as the proposed reduced threshold for outage reporting by Eligible Intermittent Resources.<sup>3</sup> Explain the impact to system reliability from a less stringent forced outage reporting threshold, e.g., 2 MW, or 5 MW, or even 9 MW. Provide all supplemental documentation and analysis which have already been prepared, including existing cost benefit analyses of the 1 MW figure and all other potential alternatives. Fully discuss alternative approaches considered and rejected in favor of the proposal, and why they were rejected.<sup>4</sup>
- (2) Are there differences between intermittent resources and other generation resources that justify requiring the more extensive forced outage reporting for intermittent resources? Do non-intermittent, similarly-sized generation resources have to install the telemetry equipment included in the proposal and, if not, what distinguishes intermittent resources from other generation resources that support the extra telemetry and forecasting installation requirements?
- (3) Please provide full justification for the CAISO's proposal to apply expanded telemetry, forecasting, and communications requirements to all intermittent resources that are subject to a Participating Generator Agreement or Qualifying Facility Participating Generator Agreement. How does this change if generators participate in the voluntary Participating Intermittent Resource Program (PIRP)? What are the costs involved for intermittent resources that will be required to install and maintain the telemetry, forecasting, and communications equipment required by the proposal? Has the CAISO conducted any studies examining the costs and benefits of this proposed requirement? If so, please disclose those results.

<sup>&</sup>lt;sup>3</sup> This should include analysis beyond that which was provided in its November 25, 2008 root cause study, which recommended, evidently without support, that forced outages be reported at the 1 MW level. *See* CAISO December 31, 2009 Answer at 5 n.4 (citing *Improving Forecasting Through Accurate Data* (Nov. 2008), *available at* http://www.caiso.com/208a/208a86fd68120.pdf (2008 Root Cause Study)).

<sup>&</sup>lt;sup>4</sup> The Commission has raised the outage reporting requirement threshold issue in its recent Notice of Inquiry related to variable energy resources, issued in Docket No. RM10-11-000. *Integration of Variable Intermittent Resources*, 130 FERC ¶ 61,053 (2010).

- (4) If PIRP was meant to be a voluntary program that considered the unique characteristics of intermittent resources, how is the imposition of telemetry, forecasting, and communications requirements on all intermittent resources a just and reasonable result? Further, please explain why it is appropriate to treat intermittent resources that otherwise would not choose to participate in PIRP differently. Please explain why it is appropriate to place this requirement on intermittent resources only in light of CAISO Tariff section 7.6.1 that treats PIRP intermittent resources and traditional generation similarly, requiring all such resources that are subject to Participating Generator Agreements or Qualifying Facility Participating Generator Agreements that have total qualifying capacity of 10 MW or greater to install the necessary telemetry and communications equipment.<sup>5</sup>
- (5) Please provide the CAISO's justification for applying the forecast fee<sup>6</sup> to all intermittent resources that are subject to a Participating Generator Agreement or Qualifying Facility Participating Generator Agreement, regardless of whether or not they elect to participate in the voluntary PIRP. As a voluntary program, intermittent resources that choose not to participate can currently avoid PIRP fees. Explain the appropriateness of a forecast fee levied on intermittent resources that choose not to participate in PIRP.
- (6) Explain in detail how the CAISO proposes to use its authority to establish exemptions to any of the above requirements, including waiver of the forecast fee, installation of telemetry, forecasting, and communications equipment, and forced outage reporting requirements in its Business Practices Manual. Explain how this authority mitigates concerns that intermittent resources will not be unduly burdened by the proposed CAISO Tariff provisions. What specific criteria and standards will the CAISO apply to assess whether to exempt an intermittent resource from any or all of these requirements? Explain why such reserved authority should not be an explicit tariff requirement and/or require prior Commission authorization.

<sup>&</sup>lt;sup>5</sup> CAISO, FERC Electric Tariff, Fourth Replacement Volume No. I, Original Sheet No. 100, §7.6.1.

<sup>&</sup>lt;sup>6</sup> CAISO, FERC Electric Tariff, Fourth Replacement Volume No. II, Original Sheet No. 1476-7, App. Q § 2.4.1 (explaining the forecast fee, which can be an amount as high as \$0.10 per MWh).

(7) Page 6 of the CAISO's 2008 Root Cause Study states that:

The results demonstrate that the majority, almost 100% of the failures occurred due to telemetry equipment failures and unreported outages. In particular, based on further investigation with site engineers, the CAISO concluded that the **primary reason** for errant data during telemetry outages is the absence of an independent or backup power supply for the telemetry equipment including the DPG. A majority of wind parks power their telemetry and meteorological equipment by back feeding from the transmission lines, or directly from a feeder line connected to a group of wind generators. Accordingly, when a site is forced into an outage resulting from utility work on the transmission lines, the DPG and other equipment lose power. Similarly, if the telemetry equipment is powered by a the wind turbine feeder line, when the line is forced off, due to maintenance or other equipment problems, then all the associated telemetry equipment using the feeder line also fails and the site is not able to provide real time telemetry to the FSP.<sup>7</sup>

a) How does the CAISO's instant proposal address what it found to be the primary reason for the errant or poor quality data? b) Please provide supporting data from the study.

Please submit a response to the information requested above within 30 days of the date of this letter. Submit six copies of your response to:

Federal Energy Regulatory Commission Office of the Secretary 888 First Street, N.E. Washington, DC 20426

Also, please send extra copies to Robert Petrocelli (202-502-8447) and Vincent Musco (202-502-6226). Response to this letter will constitute an amendment to your filing, and a notice will be issued upon receipt. Accordingly, along with your response, you should submit a form of notice pursuant to 18 C.F.R. § 35.8(b) that is suitable for publication in the Federal Register together with a copy of the same notice in electronic format.

<sup>&</sup>lt;sup>7</sup> 2008 Root Cause Study at 6.

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Pending receipt of the above information, a filing date will not be assigned to your filing. Failure to respond to this deficiency letter within the time period specified may result in an order rejecting your filing.

This order is issued pursuant to the authority delegated to the Director, Division of Electric Power Regulation – West, under 18 C.F.R § 375.307(k)(2) and is interlocutory. This order is not subject to rehearing pursuant to 18 C.F.R § 385.713.

If you have any questions regarding this letter order, please contact Robert Petrocelli at (202) 502-8447.

Sincerely,

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

cc: All Parties

Document	Content(s)
ER10-319	-000.DOC1-5

20100129-3003 FERC PDF (Unofficial) 01/29/2010