

114 FERC ¶ 61,272
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

March 16, 2006

In Reply Refer To:
California Independent System
Operator Corporation
Docket Nos. ER06-517-000 and
ER06-524-000

Alston & Bird LLP
Attn: Michael Kunselman, Esquire
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Dear Mr. Kunselman:

1. On January 18, 2006, in Docket No. ER06-517-000, the California Independent System Operator Corporation (CAISO) submitted a filing proposing revisions to CAISO's Open Access Transmission Tariff (OATT) to include Appendix 2 to CAISO's Large Generator Interconnection Procedures (LGIP), addressing the interconnection of wind generators. Also on January 18, 2006, as amended on January 19, 2006, in Docket No. ER06-524-000, the CAISO, Pacific Gas & Electric Company (PG&E), San Diego Gas & Electric Company, and Southern California Edison Company (collectively, "Joint Filing Parties") filed an amended Large Generator Interconnection Agreement (LGIA) and a new Appendix H to the OATT. These submittals were filed to comply with Order Nos. 661 and 661-A.¹ In this order, the Commission rejects in part and accepts in part these filings, effective on January 18, 2006, as requested.

¹ *Interconnection for Wind Energy*, Order No. 661, 70 Fed. Reg. 34,993 (June 16, 2005), FERC Stats. & Regs. ¶ 31,186 (2005), *order on reh'g*, Order No. 661-A, 70 Fed. Reg. 75,005 (Dec. 19, 2005), FERC Stats. & Regs. ¶ 31,198 (2005) (Wind Interconnection Orders); *see also* Order Granting Extension of Effective Date and Extending Compliance Date, 70 Fed. Reg. 47,093 (Aug. 12, 2005), 112 FERC ¶ 61,173

(continued)

Background

2. In Order No. 2003,² the Commission adopted standard procedures and a standard agreement for the interconnection of large generation facilities. The Commission required public utilities that own, control, or operate facilities for transmitting electric energy in interstate commerce to file revised OATTs containing these standard provisions, and use them to provide interconnection service to generating facilities having a capacity of more than 20 megawatts.

3. In Order No. 2003-A, on rehearing, the Commission noted that the standard interconnection procedures and agreement were based on the needs of traditional generation facilities and that a different approach might be more appropriate for generators relying on other technologies, such as wind plants.³ Accordingly, the Commission granted certain clarifications, and also added a blank Appendix G to the standard LGIA for future adoption of requirements specific to other technologies.⁴

4. In Order No. 661, the Commission adopted standard technical requirements and procedures for the interconnection of wind plants, to be included in Appendix G and a new Appendix to the LGIP. Specifically, the Commission adopted standards for low voltage ride-through and power factor design criteria (reactive power), but required that wind plants meet those standards only if the Transmission Provider shows, in the System Impact Study, that they are needed to ensure the safety or reliability of the transmission system.

(2005); Notice Extending Compliance Date, issued Oct. 28, 2005; Notice Extending Compliance Date, issued Dec. 22, 2005.

² *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, 68 Fed. Reg. 49,845 (Aug. 19, 2003), FERC Stats. & Regs., Regulations Preambles ¶ 31,146 (2003) (Order No. 2003), *order on reh'g*, 69 Fed. Reg. 15,932 (Mar. 24, 2004), FERC Stats. & Regs., Regulations Preambles ¶ 31,160 (2004) (Order No. 2003-A), *order on reh'g*, 70 Fed. Reg. 265 (January 4, 2005), FERC Stats. & Regs., Regulations Preambles ¶ 31,171 (2004) (Order No. 2003-B), *order on reh'g*, 70 Fed. Reg. 37,661 (June 30, 2005), FERC Stats. & Regs. ¶ 31,190 (2005) (Order No. 2003-C); *see also* Notice Clarifying Compliance Procedures, 106 FERC ¶ 61,009 (2004).

³ Order No. 2003-A at P 407, n.85.

⁴ *Id.*

5. The Commission, in Order No. 661-A, granted rehearing in part and adopted new low voltage ride-through provisions developed by the North American Electric Reliability Council (NERC) and the American Wind Energy Association after NERC raised reliability concerns regarding the low voltage ride-through standard in Order No. 661.⁵ We revised certain technical aspects of the low voltage ride-through standard adopted in Order No. 661. We also required that all wind plants have low voltage ride-through capability, as opposed to the case-by-case approach adopted in Order No. 661.⁶

6. In Order No. 661-A, the Commission denied requests that we require wind plants to have reactive power capability in all cases, instead of only when the System Impact Study shows that it is necessary for safety or reliability.⁷

7. The Commission also denied rehearing of the special interconnection procedures adopted in Order No. 661 permitting wind plants to complete the Interconnection Request required by section 3.3 of the LGIP with a simplified set of preliminary data depicting the wind plant as a single equivalent generator and to provide more detailed electrical design specifications within six months.⁸

8. In its compliance filings, the CAISO proposes variations from the Commission's *pro forma* wind provisions under the "independent entity variation" and "consistent with or superior to" standards.⁹ The proposed revisions concern the power factor design criteria (reactive power) and the special interconnection procedures adopted for wind plants by the Commission in the Wind Interconnection Orders. The CAISO proposes a January 18, 2006 effective date for the revised tariff sheets.

⁵ See Order No. 661-A at P 13-14, 21-30.

⁶ *Id.* at P 25.

⁷ *Id.* at P 38-46.

⁸ *Id.* at P 55-63.

⁹ In Order No. 661, the Commission stated that a Transmission Provider could seek to justify variations from the *pro forma* language under the variation standards announced in Order No. 2003. See Order No. 661 at P 107-109, *citing* Order No. 2003 at P 816, 822-27.

Notices of Filings

9. Notice of CAISO's filing in Docket No. ER06-517-000 was published in the *Federal Register*, with comments, interventions, and protests due on or before February 8, 2006.¹⁰ Notice of the Joint Filing Parties' filing in Docket No. ER06-524-000 was published in the *Federal Register*, with comments, interventions, and protests due on or before February 8, 2006.¹¹ San Diego Gas & Electric Company filed a motion to intervene in both dockets. The California Electricity Oversight Board filed a motion to intervene in Docket No. ER06-517-000. PG&E filed a motion to intervene and comments in both Dockets. On February 17, 2006, Southern California Edison Company (SCE) filed a motion to intervene out-of-time in both dockets.

Procedural Matters

10. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure,¹² the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding. Given the early stage of this proceeding and the absence of any undue prejudice or delay to any party, also pursuant to Rule 214, the Commission will grant the unopposed out-of-time motion to intervene of SCE.

Discussion

1. Commission Standard

11. In the Wind Interconnection Orders, the Commission allowed Transmission Providers to justify variations from the Final Rule Appendix G (LGIA) and Appendix 7 (LGIP) using the standards that it had approved in Order No. 2003. Two of those types of variations are relevant here. First, we allow public utilities to argue that proposed variations are "consistent with or superior to" the *pro forma* provisions in the Wind Interconnection Orders. Second, we allow independent public utility Transmission Providers, such as Regional Transmission Organizations (RTOs) and Independent System Organizations (ISOs), greater flexibility in adopting Appendices G and 7 (the "independent entity variation").¹³ While the Commission affords RTOs and ISOs greater

¹⁰ 71 Fed. Reg. 6,468 (2006).

¹¹ 71 Fed Reg. 5,307 (2006).

¹² 18 C.F.R. § 385.214 (2005).

¹³ Order No. 661 at P 107-109.

flexibility under this standard, we “nonetheless review the proposed variations to ensure that they do not provide an unwarranted opportunity for undue discrimination or produce an interconnection process that is unjust and unreasonable.”¹⁴

2. Timing for Submission of Detailed Electrical Design Standards

12. CAISO proposes to add the following language to the second paragraph of Appendix 7 (the LGIP):

No later than six months after submitting an Interconnection Request completed in this manner, *or accompanying the interconnection Customer’s return of an executed Interconnection Study agreement*, the wind plant Interconnection Customer must submit completed detailed electrical design specifications and other data (including system layout data) needed to allow the Transmission Provider to complete the System Impact Study.¹⁵

CAISO states that it intends by this modification to make it clear that CAISO will begin Interconnection Studies for wind generators, as it does with all other generators, upon receipt of complete technical data. CAISO states that the proposed modification merely clarifies what is already required of wind generators under CAISO’s LGIP. It argues that the proposed modification meets both the independent entity variation standard and the “consistent with or superior to” standard.¹⁶

13. Although it is not entirely clear, it appears that the proposed language may require a wind generator interconnection customer to provide detailed specifications and other data when it presents its executed Interconnection Study Agreement, which, under section 6 of the CAISO’s LGIP, occurs within 30 days of the receipt from the CAISO of a signed Feasibility Study Agreement. We are concerned that this would be too severe a time constraint on wind plant Interconnection Customers and would defeat the purpose of the special procedures we adopted in the Wind Interconnection Orders. We gave wind Interconnection Customers six months after submitting an Interconnection Request to submit completed detailed electrical design specifications and other details (including system layout data).

¹⁴ *PJM Interconnection, L.L.C.*, 108 FERC ¶ 61,025 at P 7 (2004).

¹⁵ January 18, 2006 Transmittal Letter in Docket No. ER06-517-000 and Attachment A.

¹⁶ *Id.* at 7.

14. Our purpose was to accommodate the technical design differences that wind generator Interconnection Customers present, in contrast with more traditional electrical generation systems. The applicant's proposed language may not provide wind generator Interconnection Customers with the time that they need to develop the technical specifications and other data for their proposed generators to fulfill their unique design requirements, and applicants have neither justified the variation under the independent entity variation standard nor shown that it is consistent with or superior to the Commission's *pro forma* provision. Therefore, we will reject it.¹⁷

3. Other Proposed Variations

15. CAISO also proposes to vary from the first sentence of section A.II of Appendix G (the Commission's *pro forma* LGIA) to delete the word "maintain" and to insert instead the words "operate within" and to further modify the sentence by inserting the phrase "in order to maintain a specified voltage schedule."¹⁸ CAISO states that it proposes this change because CAISO and Participating Transmission Owners use voltage levels or "voltage schedule" as an adjustable operating parameter to address various system conditions that include seasonal variations and equipment or facility outages. CAISO submits that this proposed variation is warranted under both the "independent entity" and the "consistent with or superior to" standards.

16. Order No. 2003 established standard terminology to describe the interconnection process. CAISO and the Joint Filing Parties propose variations between their *pro forma* documents and the Commission's *pro forma* documents to conform the terminology in their *pro forma* wind documents with the terminology used throughout the remainder of their current LGIP and LGIA.¹⁹ CAISO also proposes to change the designation of the LGIP wind generation appendix from Appendix 7 of the LGIP to Appendix 2, consistent with the numbering of the appendices in the CAISO's LGIP. In addition, CAISO proposes variations from the language in Section A of the *pro forma* LGIA wind appendix to clarify that CAISO will begin Interconnection Studies for wind generators when it receives complete technical data.

¹⁷ See Order No. 661 at P 94-100, where we took into account the technical characteristics of wind plants in allowing them more time than conventional plants to present their detailed design specifications.

¹⁸ January 18, 2006 Transmittal Letter in Docket No. ER06-524-000 at 7.

¹⁹ See California Independent System Operator, 112 FERC ¶ 61,009 (2005).

17. Similarly, Joint Filing Parties propose revisions, under the “independent entity variation” standard, to the power factor design criteria for wind plants adopted by the Commission in the Wind Interconnection Orders. Specifically, Joint Filing Parties propose to amend Article 9.6.1 of the LGIA to state that the requirements for wind generators will be in a new Appendix H to the LGIA. Joint Filing Parties also propose not to refer to the unity power factor requirement in Article 9.6.1 and instead to state that the power factor requirements relating to wind generators are set forth in the new Appendix H to the LGIA. Furthermore, Joint Filing Parties propose to modify the Table of Contents and the listing of the contents of the appendices to change the title of the new Appendix H to use the title of the new appendix specified by the Commission.

18. CAISO and the Joint Filing Parties further propose to modify certain sections of the LGIP and LGIA and to add new Appendices 2 and H to CAISO’s OATT, in accordance with Order Nos. 661 and 661-A.

19. We will accept CAISO’s other proposed changes. The variation in wording regarding voltage reflects CAISO’s operating practice and is acceptable under the “independent entity” standard. The other proposed changes are minor, are consistent with the language and intent of Appendices G and 7 and make CAISO’s LGIA and LGIP and their appendices consistent with CAISO’s OATT.

4. Reactive Power Provisions

20. PG&E notes that CAISO and the Joint Filing Parties have not proposed certain reactive power language to address the significant levels of wind generation now existing and proposed on the CAISO’s Control Area. It points out that the Midwest Independent Transmission System Operator, Inc. (Midwest ISO) has proposed, under the independent entity variation, that wind generators be subject to the same reactive power requirements as other large generators in light of the large amount of wind generation seeking to interconnect in the Midwest ISO’s footprint.²⁰ The New York Independent Transmission System Operator, Inc. (NYISO) has made a similar proposal.²¹ PG&E contends that there are similar facts and circumstances in the CAISO Control Area in California warranting a uniform reactive power requirement for all large generators. Therefore, PG&E states that, if the Commission approves the reactive power proposals submitted by the Midwest ISO and NYISO, the Commission should direct the CAISO and Joint Filing Parties to make a similar proposal for the CAISO Control Area.

²⁰ See Midwest ISO’s submittal in Docket No. ER06-356-000.

²¹ See NYISO’s submittal in Docket No. ER06-506-000.

21. Contemporaneously with this order, the Commission is issuing two separate orders rejecting the reactive power proposals submitted by Midwest ISO and NYISO.²² Accordingly, the Commission finds PG&E's request for similar treatment of reactive power by the CAISO to be moot.

By direction of the Commission.

Magalie R. Salas,
Secretary.

²² *Midwest Independent Transmission System Operator, Inc.*, 114 FERC ¶ 61270 (2006); *New York Independent System Operator, Inc.*, 114 FERC ¶ 61,271 (2006).