

135 FERC ¶ 61,148
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;
Marc Spitzer, Philip D. Moeller,
John R. Norris, and Cheryl A. LaFleur.

Southwest Power Pool, Inc.

Docket No. ER11-3154-000

ORDER APPROVING TARIFF REVISION

(Issued May 19, 2011)

1. On March 21, 2011, Southwest Power Pool, Inc. (SPP) filed a proposed amendment to Appendix C of its *pro forma* Generator Interconnection Agreement (GIA) to require that wind-powered generating facilities that execute GIAs after May 21, 2011 be capable of reducing generation output in increments of no more than 50 MW in five minute intervals, when required to curtail to protect the reliability of the transmission system. As discussed below, the Commission accepts the proposed amendment, to become effective May 21, 2011.

I. Background

2. As a Commission-approved Regional Transmission Organization (RTO), SPP provides open access transmission tariff service over more than 50,000 miles of transmission lines in eight states. SPP also administers the generation interconnection queue, operates the Energy Imbalance Market and ensures the reliable operation of the transmission system.

3. SPP states that the proposed amendment was fully vetted in the SPP stakeholder process. On December 2, 2010, the Operating Reliability Working Group (ORWG) reviewed the proposal. The following week on December 8, 2010, the Regional Tariff Working Group (RTWG), unanimously approved the proposal. On January 10 and 11, 2011, the Markets and Operations Policy Committee approved the proposed tariff amendment with no opposition. Lastly, on January 25, 2011, the SPP Board of Directors approved the proposal by consent.¹

¹ SPP Transmittal Letter dated March 21, 2011 at 4 (SPP Transmittal Letter).

II. SPP's Filing

4. SPP proposes to amend Appendix C, Interconnection Details, of the *pro forma* GIA to add the following language:

Wind Generating Facility Output Reduction

To protect the reliability of the Transmission System, a Generating Facility that is a wind plant shall be capable of reducing its generation output in increments of no more than fifty (50) MW in five (5) minute intervals. The requirements may be met by using: (a) SCADA control of circuit breakers protecting wind farm collector distribution circuits, (b) automatic control of wind turbine power output, or (c) a combination of (a) and (b).

5. SPP states that the proposed amendment is needed to protect the reliability of its transmission system. SPP explains that coal-fired and gas turbine generators are capable of reducing their outputs incrementally in response to curtailment directives, because they are able to control their fuel source. However, due to the intermittent nature of wind, not all wind generating facilities are capable of incrementally reducing output. Instead, according to SPP, such facilities are only able to respond to curtailment requests by opening their plant interconnection breaker, thereby reducing output to zero. SPP adds that this abrupt cessation in output, when only a reduction in output is necessary, can cause excessive curtailments that can adversely affect the reliability of the transmission system. SPP claims that such fluctuations on the transmission system can cause voltage control and regulation issues on the transmission system. According to SPP, when these fluctuations occur, SPP is forced to respond to a lack of capacity on the system and redispatch other units to replace the lost generation.²

6. SPP emphasizes that the effects of over-curtailments likely will worsen because of the expected addition of 4,500 MW in wind-powered resources that are scheduled to interconnect to the SPP transmission system in the next few years.³ SPP states that to address this issue, SPP proposes to amend the *pro forma* GIA as noted above to be applicable to wind generators that execute GIAs after the May 21, 2011 effective date.

7. SPP explains that the 50 MW increment limit is appropriate because it provides flexibility benefits, as it enables SPP operators to call upon wind resources for partial output reductions. According to SPP, the 50 MW increment amount corresponds to the

² *Id.* at 3.

³ SPP notes that it has 3,500 MW of wind generation interconnected to its transmission system.

amount a transmission system may reduce without calling a reserve sharing event that requires assistance. SPP states that the five minute requirement is reasonable, because SPP needs generators to respond quickly when asked to reduce output, and because the time interval is consistent with the SPP market system, which sends dispatch instructions every five minutes, including instructions to curtail.⁴

III. Notice of Filing and Responsive Pleadings

8. Notice of SPP's filing was published in the *Federal Register*, 76 Fed. Reg. 17,407 (2011), with interventions and protests due on or before April 11, 2011. Sunflower Electric Power Corporation (Sunflower) and Mid-Kansas Electric Company, LLC (Mid-Kansas) (collectively, the Joint Parties) filed a joint motion to intervene and comments. Western Farmers Electric Cooperative (WFEC) also filed a motion to intervene and comments. The following entities also filed timely motions to intervene: NextEra Energy Resources, LLC, Golden Spread Electric Cooperative, Inc., and Exelon Corporation. On April 13, 2011, Xcel Energy Services Inc (Xcel) filed a motion to intervene out-of-time.

9. The Joint Parties state that SPP's proposed tariff amendment is just, reasonable and not unduly discriminatory and should be accepted as filed, noting that the proposed amendment was adopted through an open and transparent stakeholder review process. They explain that the proposed amendment is a good starting point that will help to protect the reliability of the SPP transmission system. The Joint Parties also maintain that although the proposed amendment only applies to new wind resources, it may be necessary in the future to change market and scheduling rules to apply to all resources. The Joint Parties state that the proposed tariff amendment is a modest step to gain additional control over variable energy resources.⁵

10. WFEC also fully supports SPP's proposed tariff amendment and states that the amendment is appropriately tailored and grants wind-powered resources the flexibility to comply with the requirements. Thus, WFEC states that the proposed amendment should be approved. However, WFEC states that because existing wind generating facilities create the same reliability risks as the new wind generators, the new requirements should

⁴ SPP Transmittal Letter at 4 - 5.

⁵ Joint Parties Comments at 4 (citing the Commission's notice of proposed rulemaking *Integration of Variable Energy Resources*, 133 FERC ¶ 61,149 (2010), where the Commission stated, "existing practices as well as the ancillary services used to manage system variability were developed at a time when virtually all generation on the system could be scheduled with relative precision and when only load exhibited significant degrees of within-hour variation.").

also apply to the existing wind generation already interconnected to the SPP transmission system.⁶ At a minimum, WFEC contends that transmission owners should be permitted to seek amendment of existing GIAs to adopt the curtailment provision.⁷

IV. Discussion

A. Procedural Matters

11. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2010), the notice of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2010), the Commission will grant Xcel's late filed motion to intervene given its interest in the proceeding, the early stage of the proceeding, and the absence of undue prejudice or delay.

B. Commission Determination

12. As discussed below, we accept for filing SPP's proposed amendment to the *pro forma* GIA, Appendix C, Interconnection Details, to become effective May 21, 2011, as requested. Approval of this proposed amendment under the independent entity variation standard is appropriate here.⁸ SPP is an independent entity seeking to revise its GIA to address regional concerns regarding the impacts of SPP wind resources on the reliability of SPP's transmission system. We find that the proposed amendment not only accomplishes the purposes of Order 2003,⁹ but also is a just and reasonable and not unduly discriminatory approach to ensure the continued reliability of SPP's transmission system.

⁶ WFEC Comments at 4.

⁷ *Id.* at 4.

⁸ See, e.g., *California Independent System Operator Corporation*, 133 FERC ¶ 61,223 at P 73, n.50 (2010) (explaining that "an RTO or ISO proposing a variation must demonstrate that the variation is just and reasonable, and not unduly discriminatory, and would accomplish the purposes of Order No. 2003.")

⁹ *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, FERC Stats. & Regs. ¶ 31,146 (2003), *order on reh'g*, Order No. 2003-A, FERC Stats. & Regs. ¶ 31,160, *order on reh'g*, Order No. 2003-B, FERC Stats. & Regs. ¶ 31,171 (2004), *order 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), *cert. denied*, 552 U.S. 1230 (2008).

13. SPP explains that the inability of existing SPP wind resources to reduce their output incrementally can result in over-curtailments that can have adverse reliability impacts on SPP's transmission system. We recognize that the expected addition of at least 4,500 additional MWs of wind generation onto SPP's transmission system in the next few years will only exacerbate concerns about over-curtailments, which may adversely affect reliability. Thus, we find that requiring new wind resources to be capable of incrementally reducing their output should alleviate such potentially harmful reliability conditions. In addition, we find the 50 MW curtailment increment to be just and reasonable because it provides SPP and/or the transmission owner the operational flexibility to request partial reductions in output. According to SPP, it also corresponds to the level of reduction that may be sustained without calling a reserve sharing event in SPP. Similarly, according to SPP, the five minute response interval corresponds to the five minute dispatch signal in the SPP market system.

14. We will deny WFEC's request that the proposed amendment be applicable to existing wind resources interconnected to SPP's system. Our review indicates that the proposal is intended to address the effects of over-curtailments that could increase significantly over time as SPP expects the amount of wind generation to more than double over the next several years. We find that there is no basis in the record at this time to apply the proposed amendment to existing resources.

The Commission orders:

(A) SPP's proposed tariff amendment to the *pro forma* GIA, Appendix C is accepted to become effective May 21, 2011, as discussed in the body of this order.

(B) Western Farmers Electric Cooperative's request that the proposed curtailment requirements be applicable to existing generators is hereby denied, as discussed in the body of this order.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.