

160 FERC ¶ 61,088  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;  
Cheryl A. LaFleur, and Robert F. Powelson.

Southwest Power Pool, Inc.

Docket Nos. ER17-772-000  
ER17-772-001  
ER17-772-002

ORDER ON COMPLIANCE FILING

(Issued September 20, 2017)

1. On January 11, 2017, Southwest Power Pool, Inc. (SPP) submitted, pursuant to section 206 of the Federal Power Act (FPA),<sup>1</sup> revisions to its Open Access Transmission Tariff (Tariff)<sup>2</sup> to comply with the requirements of Order No. 825.<sup>3</sup> In this order, we accept SPP's compliance filing, subject to a further compliance filing, as discussed below.

**I. Background**

2. In Order No. 825, the Commission required that each regional transmission organization (RTO) and independent system operator (ISO) align settlement and dispatch<sup>4</sup> intervals by (1) settling energy transactions in its real-time markets at the same time interval it dispatches energy; (2) settling operating reserves transactions in its real-

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<sup>1</sup> 16 U.S.C. 824e (2012).

<sup>2</sup> See Appendix for eTariff designations.

<sup>3</sup> *Settlement Intervals and Shortage Pricing in Markets Operated by Regional Transmission Organizations and Independent System Operators*, Order No. 825, 81 Fed. Reg. 42,882 (June 30, 2016), FERC Stats. & Regs. ¶ 31,384 (2016) (Order No. 825).

<sup>4</sup> With respect to operating reserves, the Commission uses “dispatch” to describe the intervals at which they are acquired and priced. *Id.* n.2 (citing *Settlement Intervals and Shortage Pricing in Markets Operated by Regional Transmission Organizations and Independent System Operators*, FERC Stats. & Regs. ¶ 32,710, at P 1 (2015) (NOPR)).

time markets at the same time interval it prices operating reserves;<sup>5</sup> and (3) settling intertie transactions<sup>6</sup> in the same time interval it schedules intertie transactions. The Commission also required that each RTO/ISO establish a mechanism to trigger shortage pricing for any interval in which a shortage of energy or operating reserves is indicated during the pricing of resources for that interval. The Commission did not require that RTOs/ISOs settle energy and operating reserves at the same interval, nor did it require a change to the price paid by an RTO/ISO when shortage pricing is triggered.<sup>7</sup>

## II. Compliance Filing and Amendment

3. SPP proposes revisions to Attachment AE, Integrated Marketplace, of its Tariff to establish mechanisms to trigger scarcity pricing for any interval in which a shortage of energy or operating reserves is indicated during the pricing of resources for that interval. These proposed revisions include clarification of defined terms, deletion of ramp sharing provisions, and revisions regarding the effect of scarcity pricing on Market Clearing Pricings (MCPs) and the establishment of scarcity prices on Locational Marginal Prices (LMPs), among others.<sup>8</sup>

4. SPP proposes to modify the defined terms “Demand Curve,” “Scarcity Price,” and “Scarcity Pricing” to clarify how scarcity pricing will be determined in SPP’s Integrated Marketplace. SPP states that the revised definition of “Demand Curve” will provide for a

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<sup>5</sup> Operating reserves refer to certain ancillary services procured in the wholesale market, although they are often defined differently in each RTO/ISO. Operating reserves typically include (1) Regulating Reserve, used to account for very short-term deviations between supply and demand (e.g., 4 to 6 seconds); (2) Spinning, or Synchronous, Reserve which is capacity held in reserve and synchronized to the grid and able to respond within a relatively short amount of time (e.g., within 10 minutes), to be used in case of a contingency, such as the loss of a generator; and (3) Non-Spinning Reserve, which is capacity that is not synchronized to the grid and which can take longer to respond (e.g., within 10-30 minutes) in case of a contingency. *Id.* n.3 (citing Federal Energy Regulatory Commission, Price Formation in Organized Wholesale Electricity Markets: Staff Analysis of Shortage Pricing, Docket No. AD14-14-000, at 3 n.7 (Oct. 2014), available at <http://www.ferc.gov/legal/staff-reports/2014/AD14-14-pricing-rto-iso-markets.pdf>).

<sup>6</sup> Intertie transactions are transactions across RTO/ISO borders, including imports, exports and wheel-through transactions. *Id.* n.4.

<sup>7</sup> *Id.* PP 1, 71.

<sup>8</sup> SPP Transmittal at 6-7.

“series of quantity/price points used to set Locational Marginal Prices and Market Clearing Prices when there is a shortage of Energy or Operating Reserve.”<sup>9</sup> SPP states that the revised term clarifies that “Demand Curve” also includes Energy Shortages and the effect on LMP in addition to existing provisions for Operating Reserves and the effect on MCPs. SPP asserts that this revision complies with the Order No. 825 requirement that scarcity prices reflect shortages in energy and operating reserve.<sup>10</sup> SPP also proposes to modify the defined term “Scarcity Pricing” to include insufficient Energy as well as Operating Reserve, and to reference a newly created section 8.3.5 in Attachment AE of its Tariff.

5. SPP proposes to remove provisions in subsections 5.1.2.1 and 6.2.2.1 of Attachment AE that limit Operating Reserve shortage events to those shortages that are not due to ramp limitations. SPP states that its current Tariff language allows it to consider these ramp sharing provisions when determining when to institute scarcity pricing.<sup>11</sup> SPP also proposes to remove a provision in section 8.3.4.2 of Attachment AE which states that operating reserve shortages caused by insufficient ramping capability are not considered for scarcity prices. SPP states that this language is being removed under the requirements of Order No. 825.

6. SPP proposes to insert a new section 8.3.5 in Attachment AE, titled “Impact of Scarcity Pricing on Locational Marginal Prices,” which contains guidelines for calculation of LMP during energy shortages. Specifically, the proposed revisions state that, during energy shortages, LMPs are set using an Energy Demand Curve Price of \$5,000.<sup>12</sup> SPP states that setting the Energy Demand Curve Price at this level will ensure that the price is greater than the impact of all other scarcity prices, offer caps and a portion of the operating constraint Violation Relaxation Limits (VRLs). SPP argues that the modifications will therefore “provide that Operating Reserve Scarcity Prices may be

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<sup>9</sup> *Id.* at 7.

<sup>10</sup> *Id.*

<sup>11</sup> *Id.*

<sup>12</sup> *Id.* at 8.

reflected in LMPs using the Operating Reserve Demand Curves and Regulation-Up Demand Curves” as currently reflected in section 8.3.4.2 of Attachment AE of the SPP Tariff.<sup>13</sup>

7. SPP proposes to remove certain categories of constraints in section 8.3.2 of Attachment AE of its Tariff along with the associated VRLs in Addendum 1 of Attachment AE. These constraints and associated VRLs are: (1) resource capacity constraints; (2) resource ramp constraints; and (3) global power balance constraints. SPP argues that these constraints must be removed in order to establish scarcity pricing.

8. SPP does not propose Tariff revisions to comply with Order No. 825 requirements on aligning settlements and dispatch intervals. SPP states that, in the Notice of Proposed Rulemaking, the Commission recognized that SPP utilizes parallel settlement and dispatch intervals for energy and operating reserve transactions.<sup>14</sup>

9. On February 23, 2017, SPP submitted an amended compliance filing containing revisions to section 8.3.4.1 of Attachment AE of the SPP Tariff. Specifically, SPP proposes to remove references to “resource capacity,” “global power balance,” and “Resource ramp” constraints in this section outlining the manner in which VRLs affect market clearing prices.<sup>15</sup> These deletions correspond directly to the proposed deletion of those three constraints in sections 8.3.2 and 8.3.3 of Attachment AE proposed in SPP’s original compliance filing. SPP does not propose any other changes to the original compliance filing. SPP requests an effective date of May 11, 2017, consistent with the requirements of Order No. 825.

10. On February 23, 2017, Commission staff issued a data request informing SPP that additional information was necessary to process its filing. On March 29, 2017, SPP submitted a response to the data request.

### **III. Notice of Filing and Responsive Pleadings**

11. Notice of SPP’s January 11, 2017 filing was published in the *Federal Register*, 82 Fed. Reg. 5552, with interventions and protests due on or before February 1, 2017. Timely motions to intervene were filed by the Electric Power Supply Association, Sunflower Electric Power Corporation, Mid-Kansas Electric Company, LLC, Xcel Energy Services Inc. on behalf of its utility operating company affiliate Southwestern Public Service Company, Dogwood Energy LLC, and the Energy Storage Association.

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<sup>13</sup> *Id.*

<sup>14</sup> *Id.* at 3 (citing NOPR, FERC Stats. & Regs. ¶ 32,710 at n.19).

<sup>15</sup> SPP Amendment at 2.

Missouri Public Service Commission filed a notice of intervention. Golden Spread Electric Cooperative, Inc. (Golden Spread) filed a timely motion to intervene and protest. On February 27, 2017, SPP filed an answer.

12. Notice of SPP's February 23, 2017 filing was published in the *Federal Register*, 82 Fed. Reg. 12,218, with interventions and protests due on or before March 16, 2017. None was filed. Notice of SPP's March 29, 2017 response to the data request was published in the *Federal Register*, 82 Fed. Reg. 16,388, with interventions and protests due on or before April 19, 2017. None was filed.

#### **IV. Discussion**

##### **A. Procedural Matters**

13. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2017), the notice of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

14. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2017), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We will accept SPP's answer because it has provided information that assisted us in our decision-making process.

##### **B. Substantive Matters**

15. As explained below, we find that SPP's compliance filing partially complies with the directives of Order No. 825 and we therefore accept SPP's compliance filing, effective May 11, 2017, subject to a further compliance filing.

##### **1. Settlement Reform**

16. As stated above, in Order No. 825, the Commission required RTOs and ISOs to align settlement and dispatch intervals by (1) settling energy transactions in their real-time markets at the same time interval they dispatch energy; (2) settling operating reserves transactions in the real-time markets at the same time interval they price operating reserves; and (3) settling intertie transactions in the same time interval they schedule intertie transactions. SPP states that it already aligns these dispatch and settlement intervals in compliance with Order No. 825, and therefore does not submit any revisions to address the requirement to align such intervals.<sup>16</sup> In support, SPP explains that, in Order No. 825, SPP was not identified as one of the RTOs/ISOs that did not align

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<sup>16</sup> SPP Transmittal at 6, n.26.

its settlement and dispatch intervals because SPP's settlement and dispatch of energy transactions, and pricing and dispatch of operating reserve transactions in the real-time market are aligned in five minute intervals.<sup>17</sup>

**a. Data Request**

17. In its data request, Commission staff requested further information regarding SPP's dispatch and settlement practices for intertie transactions.

**b. Response**

18. In its answer, SPP explains that it schedules intertie transactions, referred to as "interchange" transactions under the SPP Tariff,<sup>18</sup> on a one-minute basis while it settles them on a five-minute basis. SPP explains that the Commission accepted this construct during SPP's compliance with Order No. 764,<sup>19</sup> and contends that it is superior to the *pro forma* tariff. SPP explains that its five-minute settlement interval is the finest granularity of LMP available under the market solution, and asserts that its practices are superior to Order No. 825's requirements because they provide more flexibility for scheduling than required by the Commission.<sup>20</sup>

**c. Commission Determination**

19. As the Commission noted in Order No. 825, SPP's settlement and dispatch of energy transactions, and pricing and dispatch of operating reserve transactions, in the real-time market are aligned in five minute intervals.<sup>21</sup> Therefore, SPP already settles its real-time energy transactions in the same time intervals in which it dispatches them and

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<sup>17</sup>*Id.* at 3, nn.12 and 16. *See* Order No. 825, FERC Stats. & Regs. ¶ 31,384 at P 22 (noting that SPP dispatches and settles real-time energy transactions at five minute intervals); *id.* P 26 (noting that SPP prices and settles operating reserve products in its real-time market at five minute intervals); *id.* n.366 (omitting SPP from list of RTOs/ISOs that do not align real-time settlement and dispatch intervals).

<sup>18</sup> SPP Tariff, Attachment AE Section 1.1 I (defining "Interchange Transaction").

<sup>19</sup> *Integration of Variable Energy Resources*, Order No. 764, FERC Stats. & Regs. ¶ 31,331, *order on reh'g*, Order No. 764-A, 141 FERC ¶ 61,232 (2012), *order on clarification and reh'g*, Order No. 764-B, 144 FERC ¶ 61,222 (2013).

<sup>20</sup> SPP March 29 Response at 5.

<sup>21</sup> *See* Order No. 825, FERC Stats. & Regs. ¶ 31,384 at PP 22, 26.

settles its real-time operating reserves transactions in the same intervals in which it prices them. Accordingly, we find that SPP complies with Order No. 825's requirement to align settlement and dispatch intervals for energy and operating reserve transactions in the real-time market and no further revisions to the Tariff are necessary to comply with that requirement. Further, we accept SPP's explanation regarding its interchange scheduling and settlement practices, and find that SPP's practices are consistent with or superior to the Commission's requirements in Order No. 825 regarding settling and scheduling intertie transactions, and that no further revisions to those practices are necessary as part of this proceeding.

## **2. Shortage Pricing**

20. As stated above, in Order No. 825, the Commission required that each RTO/ISO establish a mechanism to trigger shortage pricing for any interval in which a shortage of energy or operating reserves is indicated during the pricing of resources for that interval.<sup>22</sup>

21. To comply with this directive, SPP proposes to remove ramp sharing provisions and other provisions that prevented shortages caused by insufficient ramp capability to trigger shortage pricing. Further, SPP proposes to remove certain constraints and their associated VRLs from section 8.3.2 of Attachment AE, and to include a new demand curve for energy priced at \$5,000 and guidelines for its use in calculating LMPs.

### **a. Protest**

22. Golden Spread contends that SPP's filing does not fully comply with the requirements of Order No. 825 because it does not address certain behaviors that affect scarcity pricing. Specifically, Golden Spread alleges that the practice of committing additional capacity through the Reliability Unit Commitment (RUC) process or manual commitments can prevent potential scarcity pricing events from occurring in intervals in which a shortage would occur. Golden Spread contends that this practice is not transparent and creates uplift charges and a disincentive to engage in efficient operational and investment decisions, undermining the Commission's goals in Order No. 825. Golden Spread argues that SPP should procure less resources through the RUC and manual commitment processes and rely principally on the submission of competitive offer curves in the Day Ahead and Real-Time markets. Golden Spread asserts that the Commission should require SPP to eliminate RUC and manual commitment practices that mask scarcity pricing conditions and address any commitment outside of the

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<sup>22</sup> *Id.* P 1.

normal Day-Ahead and Real-Time markets so that such action does not undermine Order No. 825.<sup>23</sup>

**b. Answer**

23. SPP contends that Golden Spread's answer raises issues that are beyond the scope of this proceeding. SPP contends that Order No. 825 did not require revisions to the RUC or manual commitment processes of SPP. Further, SPP contends that abandoning the RUC processes and relying solely on scarcity pricing will create a substantial mismatch between commitments in the Day-Ahead Market and real-time operations, which will increase prices and undermine efficient and reliable market operations.<sup>24</sup>

**c. Commission Determination**

24. We find SPP's proposed revisions related to shortage pricing, as amended, partially comply with the Commission's directives in Order No. 825 and therefore accept them, subject to condition. However, we reject, as outside the scope of Order No. 825, SPP's proposed provisions of section 8.3.5 of Attachment AE of the Tariff that would create a demand curve to set scarcity prices for energy shortages. Order No. 825 required SPP to "modify its market rules to allow the market-clearing price during periods of operating reserve shortage to reach a level that rebalances supply and demand" and to "trigger shortage pricing for any interval in which a shortage of energy or operating reserves is indicated during the pricing of resources for that interval."<sup>25</sup> In Order No. 825, the Commission did not require SPP to change its shortage pricing levels but required SPP to initiate its shortage pricing procedures when a shortage is indicated. The Commission stated that "any revisions an RTO/ISO may propose to shortage pricing levels (which are not required by this Final Rule) must be filed under section 205."<sup>26</sup> Similarly, in Order No. 825, the Commission stated that RTO/ISOs like SPP could

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<sup>23</sup> Golden Spread Protest at 3-12.

<sup>24</sup> SPP February 27 Answer at 4-11.

<sup>25</sup> 18 C.F.R. § 35.28(g)(1)(iv)(A) (2017).

<sup>26</sup> Order No. 825, FERC Stats. & Regs. ¶ 31,384 at P 204.

propose to modify administrative shortage prices pursuant to section 205 of the FPA.<sup>27</sup> Therefore, in a compliance filing due within 30 days of the date of issuance of this order, we direct SPP to remove the proposed provisions of section 8.3.5 of Attachment AE of the Tariff that would create the demand curve to set scarcity prices for energy shortages. Further, it is our understanding that the removal of the constraints and their associated VRLs from section 8.3.2 of Attachment AE is intended to facilitate the creation of a demand curve to set scarcity prices for energy shortages. To the extent that this is true, we direct SPP to reinsert them. If this is not the case, we direct SPP to explain why their removal complies with Order No. 825. In addition, we direct SPP to remove proposed revisions to the definition of “Scarcity Pricing” which reference proposed section 8.3.5 of Attachment AE. SPP may propose these or other changes to modify the shortage pricing levels for energy shortages in a separate filing pursuant to section 205 of the FPA.

25. We similarly dismiss Golden Spread’s concerns as outside the scope of this proceeding. As stated above, Order No. 825 required RTOs to trigger shortage prices when a shortage is indicated. The order did not require the modifications to SPP’s RUC or manual commitment processes that Golden Spread advocates. However, we think that Golden Spread has raised an important issue that SPP should consider exploring through its stakeholder process. We understand that there may not be sufficient data available to stakeholders to facilitate these discussions, as the Commission noted in its Notice of Proposed Rulemaking in Docket No. RM17-2-000.<sup>28</sup> While further Commission action in Docket No. RM17-2-000 may result in additional transparency, we encourage SPP to work with its stakeholders and provide them with the data necessary to aid in any discussions about this issue.

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<sup>27</sup> *Id.* P 176 (“any RTO/ISO may file, pursuant to section 205 of the FPA, to propose a modification of any of the administrative shortage prices as a result of this Final Rule, as PJM and SPP indicate they might.”).

<sup>28</sup> *Uplift Cost Allocation and Transparency in Markets Operated by Regional Transmission Organizations and Independent System Operators*, Notice of Proposed Rulemaking, 158 FERC ¶ 61,047, P 92 (2017) “greater transparency will allow stakeholders to better assess the RTO’s/ISO’s operator-initiated commitment practices and raise any issues of concern through the stakeholder process.”

The Commission orders:

(A) SPP's compliance filing is hereby accepted, subject to condition, effective May 11, 2017, as discussed in the body of this order.

(B) SPP is hereby directed to submit a compliance filing, within 30 days of the date of this order, as discussed in the body of this order.

By the Commission.

( S E A L )

Kimberly D. Bose,  
Secretary.

## Appendix—eTariff Designations

Southwest Power Pool, Inc., FERC FPA Electric Tariff, Open Access Transmission Tariff, Sixth Revised Volume No. 1, [Attachment AE \(MPL\), Attachment AE Integrated Marketplace, 5.0.0](#).

Southwest Power Pool, Inc., FERC FPA Electric Tariff, Open Access Transmission Tariff, Sixth Revised Volume No. 1, [Att. AE \(MPL\) 1.1 D, Attachment AE \(MPL\) section 1.1 D, 2.0.0](#).

Southwest Power Pool, Inc., FERC FPA Electric Tariff, Open Access Transmission Tariff, Sixth Revised Volume No. 1, [Att. AE \(MPL\) 1.1 S, Attachment AE \(MPL\) section 1.1 S, 5.0.0](#).

Southwest Power Pool, Inc., FERC FPA Electric Tariff, Open Access Transmission Tariff, Sixth Revised Volume No. 1, [Att. AE \(MPL\) 5.1.2, Attachment AE \(MPL\) section 5.1.2, 5.0.0](#).

Southwest Power Pool, Inc., FERC FPA Electric Tariff, Open Access Transmission Tariff, Sixth Revised Volume No. 1, [Att. AE \(MPL\) 6.2.2, Attachment AE \(MPL\) section 6.2.2, 2.0.0](#).

Southwest Power Pool, Inc., FERC FPA Electric Tariff, Open Access Transmission Tariff, Sixth Revised Volume No. 1, [Att. AE \(MPL\) 8.3.1, Attachment AE \(MPL\) section 8.3.1, 1.0.0](#).

Southwest Power Pool, Inc., FERC FPA Electric Tariff, Open Access Transmission Tariff, Sixth Revised Volume No. 1, [Att. AE \(MPL\) 8.3.2, Attachment AE \(MPL\) section 8.3.2, 1.0.0](#).

Southwest Power Pool, Inc., FERC FPA Electric Tariff, Open Access Transmission Tariff, Sixth Revised Volume No. 1, [Att. AE \(MPL\) 8.3.3, Attachment AE \(MPL\) section 8.3.3, 2.0.0](#).

Southwest Power Pool, Inc., FERC FPA Electric Tariff, Open Access Transmission Tariff, Sixth Revised Volume No. 1, [Att. AE \(MPL\) 8.3.4, Attachment AE \(MPL\) section 8.3.4, 4.1.0](#).

Southwest Power Pool, Inc., FERC FPA Electric Tariff, Open Access Transmission Tariff, Sixth Revised Volume No. 1, [Att. AE \(MPL\) 8.3.5, Attachment AE \(MPL\) section 8.3.5, 0.0.0](#).

Southwest Power Pool, Inc., FERC FPA Electric Tariff, Open Access Transmission Tariff, Sixth Revised Volume No. 1, [Att. AE \(MPL\) Add. 1, Attachment AE \(MPL\) Addendum 1, 3.0.0.](#)