

141 FERC ¶ 61,047
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;
Philip D. Moeller, John R. Norris,
Cheryl A. LaFleur, and Tony T. Clark.

Southwest Power Pool, Inc.

Docket No. ER12-550-000

ORDER ON COMPLIANCE FILING

(Issued October 18, 2012)

1. On December 5, 2011, Southwest Power Pool, Inc. (SPP) submitted a filing in compliance with the directives in an October 4, 2011 Commission order¹ as part of its ongoing compliance with the Commission's demand response and pricing during periods of operating reserve shortage requirements established in Order Nos. 719 and 719-A.² SPP requests an effective date of December 5, 2011 for revisions to its Open Access Transmission Tariff (Tariff) proposed in its compliance filing. In this order, we conditionally accept SPP's December 5, 2011 filing.

I. Background

A. Order No. 719

2. On October 17, 2008, the Commission issued Order No. 719, which established reforms to improve the operation of organized wholesale electric power markets. The Commission amended its regulations in the areas of: (1) demand response, including pricing during periods of operating reserve shortage; (2) long-term power contracting; (3) market-monitoring policies; and (4) the responsiveness of Regional Transmission Organizations (RTO) and Independent System Operators (ISO) to their customers and

¹ *Southwest Power Pool, Inc.*, 137 FERC ¶ 61,011 (2011) (October 2011 Order).

² *Wholesale Competition in Regions with Organized Electric Markets*, Order No. 719, FERC Stats. & Regs. ¶ 31,281 (2008), *order on reh'g*, Order No. 719-A, FERC Stats. & Regs. ¶ 31,292 (2009), *order denying reh'g*. Order No. 719-B, 129 FERC ¶ 61,252 (2009).

other stakeholders.³ In the area of demand response, the Commission required each RTO and ISO to: (1) accept bids from demand response resources in the RTO's or ISO's markets for certain ancillary services, on a basis comparable to other resources; (2) eliminate, during a system emergency, a charge to a buyer that takes less electric energy in the real-time market than it purchased in the day-ahead market; (3) in certain circumstances, permit an aggregator of retail customers (ARC) to bid demand response on behalf of retail customers directly into the organized energy market; and (4) modify its market rules, as necessary, to allow the market-clearing price, during periods of operating reserve shortage, to reach a level that rebalances supply and demand so as to maintain reliability while providing sufficient provisions for mitigating market power including, but not limited to, showing how demand resources discipline bidding behavior to competitive levels.⁴

3. Additionally, the Commission recognized that further reforms may be necessary to eliminate barriers to demand response in the future. To that end, the Commission required each RTO or ISO to assess and report on any remaining barriers to comparable treatment of demand response resources that are within the Commission's jurisdiction. The Commission further required each RTO's or ISO's independent market monitor to submit a report describing its views on its RTO's or ISO's assessment to the Commission.⁵

B. Order No. 719-A

4. On July 16, 2009, the Commission issued Order No. 719-A, which, in response to requests for rehearing, revised and clarified certain of the findings in Order No. 719 and, as relevant here, directed SPP to make a compliance filing relating to aspects of demand response. In Order No. 719-A, the Commission required RTOs and ISOs to develop mechanisms for sharing information about demand response resources with affected load-serving entities, as well as develop and implement protocols allowing ARCs to operate in organized markets, addressing concerns such as double-counting, deviations, underscheduling in the day-ahead market, metering, billing, settlement, information sharing, and verification measures.⁶

³ Order No. 719, FERC Stats. & Regs. ¶ 31,281 at P 1.

⁴ *Id.* PP 4, 15, 246-247.

⁵ *Id.* P 274.

⁶ Order No. 719-A, FERC Stats. & Regs. ¶ 31,292 at PP 67, 69-70.

C. November 2009 Order

5. On November 20, 2009, the Commission issued an order that accepted in part, and rejected in part, various portions of SPP's April 28, 2009 filing made in response to Order No. 719.⁷ The November 2009 Order required further action by SPP on a number of demand response issues, including: a substantive discussion of the technical requirements, policies, and procedures needed for demand response resource participation in SPP's Energy Imbalance Service Market (EIS Market);⁸ an explanation of SPP's requirements for aggregation of customers into a single resource; and submission of baseline, measurement, and verification methodologies for demand response resources, as well as a timeline for their implementation.⁹ The November 2009 Order also addressed remaining criteria pertaining to price formation during periods of operating reserve shortage, and it required both SPP and its independent market monitor to file reports on barriers to entry of demand response resources within the SPP market.¹⁰

D. October 2011 Order

6. On October 4, 2011, the Commission issued an order clarifying certain findings made in the November 2009 Order and conditionally accepting two filings submitted by SPP in compliance with Order Nos. 719 and 719-A and the Commission's directives in the November 2009 Order. The Commission also accepted reports submitted by SPP and the SPP independent market monitor regarding remaining barriers to demand response.¹¹ In the October 2011 Order, the Commission required further modification or explanation of a number of issues, including: SPP's proposed measurement and verification methodologies, the submission of Resource Plans, the collection of availability data for

⁷ *Southwest Power Pool, Inc.*, 129 FERC ¶ 61,163 (2009) (November 2009 Order). The November 2009 Order addressed SPP's compliance with Order No. 719 requirements regarding demand response, pricing during periods of operating reserve shortage, long-term power contracting, and market monitoring. The Commission issued a separate order on SPP's responsiveness to customers and other stakeholders. *See Southwest Power Pool, Inc.*, 133 FERC ¶ 61,069 (2010).

⁸ SPP's EIS Market is a real-time energy market. Tariff provisions establishing the rules and operations of the EIS Market are included in Attachment AE of SPP's Tariff.

⁹ November 2009 Order, 129 FERC ¶ 61,163 at PP 47-48, 51, 70, 74.

¹⁰ *Id.* PP 86, 89, 96.

¹¹ October 2011 Order, 137 FERC ¶ 61,011 at P 1.

dispatch, ARC aggregation and certification requirements, the definition of “Market Participant,” criteria regarding market rules governing price formation during periods of operating reserve shortage, and remaining Order No. 719-A compliance requirements.¹²

E. Extension of Time—Measurement and Verification Provisions

7. On November 18, 2011, SPP filed a motion for an extension of time to implement the demand response baseline calculation, measurement, and verification compliance requirements required by Order No. 719 and the directives in the October 2011 Order.¹³ SPP requested that the Commission allow it to implement these provisions as part of its Integrated Marketplace,¹⁴ which SPP anticipates launching in March of 2014, rather than as part of its current EIS Market. SPP argued that attempting to implement these methodologies in its EIS Market for a short duration of time would divert internal and vendor resources from developing the Integrated Marketplace in a timely manner, causing delays with no concomitant benefit to stakeholders. The Commission granted SPP’s motion on November 30, 2011.¹⁵

¹² *Id.* PP 29, 45-46, 48-49, 65-72, 78, 82-84, 88.

¹³ These measurement and verification provisions were to become effective 60 days after SPP notified the Commission that it had completed prerequisite system changes, which SPP estimated it could complete approximately 18 months after Commission approval of its measurement, verification, and baseline calculation standards.

¹⁴ As part of its Integrated Marketplace reforms, SPP has proposed to implement day-ahead and real-time energy markets and an operating reserve market. SPP submitted its Integrated Marketplace proposal on February 29, 2012 in Docket No. ER12-1179-000, which the Commission addresses in an order issued concurrently with the instant order in *Southwest Power Pool, Inc.*, 141 FERC ¶ 61,048 (2012). We make no findings as to SPP’s Integrated Marketplace proposal here. For purposes of this compliance filing, SPP explains that, given the Commission’s approval of its request to delay implementation of its demand response baseline, measurement, and verification methodologies until early 2014 (as part of its Integrated Marketplace reforms), it is not submitting tariff revisions for these methodologies at this time. SPP describes these tariff revisions in its compliance filing and states that it commits to include these revisions as part of its Integrated Marketplace proposal. SPP Filing at 5-6.

¹⁵ *Southwest Power Pool, Inc.*, Notice of Extension of Time in Docket Nos. ER09-1050-001, *et al.* (Nov. 30, 2011).

II. Notice of Filings and Responsive Pleadings

8. Notice of SPP's December 5, 2011 compliance filing was published in the *Federal Register*, 76 Fed. Reg. 77,813 (2011), with interventions and protests due on or before December 27, 2011. Constellation Energy Commodities Group, Inc. and Constellation NewEnergy, Inc. together submitted a timely motion to intervene.

III. Discussion

A. Procedural Matters

9. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2012), the timely, unopposed motion to intervene serve to make the entities that filed them parties to this proceeding.

B. Substantive Matters

1. Provisions for Measurement and Verification

a. Effective in the Integrated Marketplace

10. In the October 2011 Order, the Commission required SPP to explain the determination of the controllable load response under the submitted real-time response methodology (Submitted Methodology).¹⁶ The Commission also required SPP to explain why it is excluding ARCs or individual demand response resources with real-time measurement and verification capability not associated with retail demand response programs from utilizing the Submitted Methodology. Further, the Commission required SPP to explain why the use of ICCP is appropriate for measurement and verification and to define this term in the SPP Tariff. Additionally, the Commission required SPP to explain how settlement occurs, as well as the associated relationships between controllable load, the demand response resource, and an ARC.¹⁷

¹⁶ Under the Submitted Methodology, the demand response provided by the demand response resource is sent directly to SPP via Inter Control Center Communication Protocol (ICCP). As proposed, the Submitted Methodology may only be used by demand response resources: (1) that are using strictly behind-the-meter generation to provide their response or (2) where the market participant is offering the demand response resource under a retail tariff provision that includes near real-time measurement and verification terms.

¹⁷ October 2011 Order, 137 FERC ¶ 61,011 at PP 68, 71-72.

11. In regard to the calculated real-time response methodology (Calculated Methodology),¹⁸ the Commission required SPP to specify in its Tariff how baselines are developed. The Commission found that SPP neither specified nor defined, in proposed section 1.2.9 of Attachment AE, how the hourly baseline submitted by market participants should be developed or calculated. The Commission also questioned whether the 30-day average hourly integrated metered load would be the basis for the hourly baselines to be submitted by market participants, or whether SPP intended or had specified an alternative hourly baseline definition.¹⁹

12. The Commission also required SPP to modify proposed section 1.2.2(1) of Attachment AE to remove the certification requirement for the Calculated Methodology, in which SPP had required market participants (including ARCs) desiring to offer controllable load in the form of a demand response resource to certify that their resource is not precluded by the laws or regulations of the relevant electric retail regulatory authority. Further, the Commission required SPP to clarify the size of the demand reduction that is eligible for settlement, as provided in section 1.2.9.3 of Attachment AE. The Commission found that this section did not address the potential circumstance in which SPP asks for a level of demand reduction, but the controllable load provides demand response in excess of the requested level.²⁰

i. SPP's Filing

13. SPP states that the purpose of the Submitted Methodology is to provide a streamlined option for demand response resources that are capable of providing near real-time measurement and verification, thus obviating the need to employ the Calculated Methodology. SPP asserts that behind-the-meter generation with sufficient net metering and real-time capabilities can provide demand response to the market without the need to calculate a baseline and conduct after-the-fact measurement and verification because it can determine how such resources have responded to dispatch instruction in real-time. SPP states that these generators employ meters on both the generation and load and

¹⁸ The proposed Calculated Methodology provides that the response provided by a demand response resource will be calculated as the difference between: (1) the lesser of (a) the real-time consumption of the controllable load associated with the demand response resource in the dispatch interval immediately preceding the initial deployment of the demand response resource, or (b) the hourly baseline for the hour; and (2) the real-time value of the associated controllable load received via ICCP, whenever the demand response resource's dispatch is greater than zero.

¹⁹ October 2011 Order, 137 FERC ¶ 61,011 at P 67.

²⁰ *Id.* PP 69-70.

therefore can provide a net metered value to SPP that represents the amount of demand response. SPP further explains that, for demand response provided by retail demand response programs, the calculation of baselines and subsequent measurement and verification are governed by the retail tariff. SPP states it relies on the values provided and calculated by the market participant (the load-serving entity) in accordance with its retail tariff demand response provisions.²¹

14. SPP asserts that the Submitted Methodology is not available to ARCs or individual demand response resources with real-time measurement and verification capability not associated with retail demand response programs because such resources are not metered as resources and therefore cannot provide real-time measurement and verification. Thus, SPP asserts, it must utilize the Calculated Methodology to determine a baseline and then measure and verify the resource's response. SPP explains that it developed the Calculated Methodology specifically for demand response resources that lack the necessary infrastructure to provide the data and response needed for the Submitted Methodology.²²

15. SPP explains that it uses ICCP because it is an industry-accepted, computer-to-computer communication protocol that allows SPP to receive real-time data used for calculated resource output, including demand response. SPP states that it plans to include the following definition for ICCP in Attachment AE as part of its Integrated Marketplace filing:

Inter Control Center Communication Protocol (“ICCP”): a protocol under International Electrotechnical Commission Standard 870-6 that enables the communication of interchange data over wide area networks (WAN) between a number of utilities and control center computer servers used to tabulate interchange data.²³

16. SPP describes controllable load as a category of demand response resources that is associated with actual load reduction, as opposed to those demand response resources whose demand response is facilitated by behind-the-meter generation or cogeneration. SPP explains that controllable load is load that provides demand response in the form of a load reduction, and the demand response resource is the portion of a controllable load that is modeled as a resource in SPP's market systems. SPP explains that, to participate

²¹ SPP Filing at 18.

²² *Id.* at 18-19.

²³ *Id.* at 21-22.

in the market as a demand response resource, the market participant that registers the resource is responsible for providing necessary metering and operational data and is the party to which SPP provides payment in settlement. According to SPP, if demand response is provided by a single controllable load that is registered as a demand response resource and is participating on its own behalf in the market, this resource provides all necessary data to SPP, and SPP settles with the demand response resource. With respect to aggregation, SPP explains that the ARC that registers multiple demand response resources is responsible for submitting all data, and SPP provides payment to the ARC.²⁴

17. SPP states that it designed the Tariff language governing the submission of baselines to provide market participants some discretion and flexibility so that the baselines accurately reflect the anticipated consumption of controllable load when that load is not dispatched, as well as to address any expected changes in consumption patterns (e.g., holiday shutdowns). SPP proposes that, rather than adopt a rigid formula based on the previous 30 days, it will allow market participants to calculate and submit their baselines and will provide a process for SPP to adjust the submitted baselines if they deviate from the hourly integrated metered load during the previous 30 days. SPP asserts that this process will ensure that market participants submit baselines that reflect anticipated consumption as accurately as possible.²⁵ SPP also notes that it plans to propose Tariff language in its Integrated Marketplace filing clarifying that market participants should develop their baselines using the average of the hourly integrated controllable load for the same hours in the last 30 days when the resource was not dispatched, adjusted as necessary to account for changes in expected consumption by the controllable load.²⁶

18. SPP explains that, when it submits its Integrated Marketplace filing, it will remove the certification requirement for the Calculated Methodology from section 1.2.2(l) of Attachment AE. SPP also states that it plans to, in its Integrated Marketplace filing, revise section 1.2.9.3 of Attachment AE to provide that, in the case where the controllable load's demand reduction is in excess of the dispatch instruction, the resource's production value will equal the value requested in the dispatch instruction.²⁷

²⁴ *Id.* at 13.

²⁵ *Id.* at 19-20.

²⁶ *Id.* at 20.

²⁷ *Id.* at 21-22.

ii. Commission Determination

19. SPP's explanations have provided some clarity with respect to the Submitted Methodology. However, we find that some aspects of SPP's proposal require further clarification or modification. For example, it is unclear whether SPP intends to require all market participants whose demand response is facilitated by behind-the-meter generation to use net metering (i.e., employing meters on both the generation and load). Further, it is unclear whether SPP intends to require all market participants whose demand response is facilitated by behind-the-meter generation to use the Submitted Methodology or whether these market participants may choose, at market registration, to use the Calculated Methodology. Consequently, we will require SPP to make these clarifications for demand response facilitated by behind-the-meter generation in a compliance filing due 60 days after the issuance of this order, and to make any associated clarifications in the SPP Tariff.²⁸

20. In addition, it remains unclear why SPP proposes excluding ARCs or individual demand response resources with real-time measurement and verification capability not associated with retail demand response programs from using the Submitted Methodology. SPP asserts that demand response resources with real-time measurement and verification capability not associated with retail demand response programs are not metered as resources. For this reason, SPP claims that it cannot use real-time metering for measurement and verification purposes. We find this statement ambiguous. For example, it is unclear whether SPP means that, because these demand response resources are not associated with a retail tariff program, it cannot treat them as "resources" within market models. Further, it is unclear how a demand response resource with real-time measurement and verification capability not associated with a retail tariff program would be committed and dispatched. Additionally, we note that SPP references ICCP in its discussion of both the Submitted and Calculated Methodologies, as well as in its discussion of Resource Plans and real-time data requirements, and states that all demand response resources must submit data in real-time using ICCP.²⁹ But SPP has failed to explain what additional real-time measurement and verification capability SPP requires

²⁸ We note that in SPP's February 29, 2012 Integrated Marketplace filing, SPP refers to the Submitted Methodology as the "Submitted Resource production option" (described in section 4.1.2.1(1)(a) in proposed Attachment AE) and the Calculated Methodology as the "Calculated Resource production option" (described in section 4.1.2.1(1)(b) in proposed Attachment AE). SPP adopts much of its previously-proposed measurement and verification Tariff language, with some exceptions.

²⁹ SPP Filing at 9-10.

of demand response resources that are eligible to use the Submitted Methodology beyond that required from those only eligible to use the Calculated Methodology.³⁰

21. Moreover, for demand response resources with real-time measurement and verification capability associated with retail demand response programs that are eligible to use the Submitted Methodology, it appears that additional real-time measurement and verification capability—if that is the case—is not necessarily an essential component for these resources’ use of the Submitted Methodology. SPP states that, for these demand response resources, the calculation of baselines and subsequent measurement and verification are governed by the retail tariff and that SPP simply relies on the value provided and calculated by the market participant load-serving entity in accordance with its retail tariff. This seems to suggest that SPP relies on a demand response value based on the establishment of a baseline and subsequent calculations that may differ from the Calculated Methodology, which we understand as providing a uniform measurement and verification methodology in the SPP region. If this is a correct interpretation, allowing only this category of demand response resources to use the Submitted Methodology could result in undue discrimination against similarly situated demand response resources not associated with retail demand response programs.

22. Accordingly, because of these remaining ambiguities, we will require SPP to provide, in a compliance filing due 60 days after the issuance of this order, an explanation of why it excludes demand response resources with real-time measurement and verification capability not associated with retail demand response programs from using the Submitted Methodology.³¹ SPP’s compliance filing should respond to the concerns we identify above regarding its explanation that demand response resources with real-time measurement and verification capability not associated with retail demand response programs cannot use the Submitted Methodology because they are not “metered as resources.” We will also require SPP to explain in this compliance filing what

³⁰ While we infer that the additional real-time measurement and verification capability SPP requires of demand response resources whose demand response is facilitated by behind-the-meter generation involves net metering, SPP has not explained what additional real-time measurement and verification capability it intends for demand response resources with real-time measurement and verification capability associated with retail demand response programs.

³¹ We note that in SPP’s February 29, 2012 Integrated Marketplace filing, SPP continues to exclude demand response resources with real-time measurement and verification capability not associated with retail demand response programs from using the Submitted Resource production option in section 4.1.2.1(1)(a) of proposed Attachment AE.

additional real-time measurement and verification capability is necessary for use of the Submitted Methodology and to include this information in its Tariff. SPP should also explain whether demand response resources with real-time measurement and verification capability associated with retail demand response programs have additional real-time measurement and verification capability that allows them to use the Submitted Methodology, and if not, to address concerns that treating such resources differently from demand response resources with real-time measurement and verification capability that *are not* in retail demand response programs could be unduly discriminatory.

23. With regard to the calculation of baselines under the Calculated Methodology, we are satisfied by SPP's commitment to include language in its Integrated Marketplace filing to clarify how market participants will develop and calculate hourly baselines.³² We note, however, that we are not ruling here on Tariff language proposed in SPP's February 29, 2012 Integrated Marketplace filing, as this language is not before us in the instant proceeding.

24. We accept SPP's explanations regarding settlement and the associated relationships between controllable load, the demand response resource, and an ARC because they address the uncertainties regarding terms used in the Tariff and how the settlement process will work.

25. We are satisfied with SPP's commitment to include the following in its Integrated Marketplace proposal: SPP's planned modifications to proposed section 1.2.2(l) of Attachment AE to remove the certification requirement for the Calculated Methodology,³³ SPP's proposed definition for the term ICCP,³⁴ and SPP's planned

³² In its February 29, 2012 Integrated Marketplace filing, SPP proposes language in section 4.1.2.1(3)(a) of Attachment AE specifying that market participants calculate their baselines as the average of the hourly integrated controllable load for the same hours in the last 30 calendar days when the resource was not dispatched, adjusted as necessary to account for changes in the expected level of energy consumption by the controllable load.

³³ SPP has not included this certification requirement in section 2.6 of Attachment AE in its February 29, 2012 Integrated Marketplace filing.

³⁴ In its February 29, 2012 Integrated Marketplace filing, SPP replaces the term "ICCP" with the more general term "telemetry" in its descriptions of the "Submitted Resource production option" and the "Calculated Resource production option" in proposed Attachment AE. We note, however, that SPP uses the term "ICCP" elsewhere in its Tariff (*see, e.g.*, SPP Tariff, Attachment AO, Article 2(g)).

revisions to section 1.2.9.3 of Attachment AE to state that, in the case where the controllable load's demand reduction is in excess of the dispatch instruction, the resource's production value will equal the value requested in the dispatch instruction.³⁵ We reiterate, however, that we are not ruling on Tariff language proposed in SPP's February 29, 2012 Integrated Marketplace filing, as this language is not before us in the instant proceeding. Further, we recognize that additional Tariff modifications relating to measurement and verification may result from this Order No. 719 compliance proceeding, and SPP will need to incorporate these revisions in its Tariff language for the Integrated Marketplace.

b. Effective in the EIS Market

26. In the October 2011 Order, the Commission required SPP to provide explanations of the following regarding the newly defined term "Controllable Load:" (1) the meaning of the phrase "must be associated with a demand response Resource" in the proposed definition of controllable load,³⁶ (2) why SPP substituted the term "Controllable Load" for the term "demand response" in sections 1.2.9 and 1.2.10 of Attachment AE, (3) why controllable load must be able to be "subsequently increased at the instruction of an SPP operator in order to provide a dispatchable quantity in the form of a demand response Resource," and (4) how controllable load would get the instructions from SPP to increase or decrease its response.³⁷

³⁵ SPP, in its February 29, 2012 Integrated Marketplace filing, does not adopt this language because it has removed Tariff provisions relating to this language. We note that SPP has included demand response resources as sub-categories when describing uninstructed resource deviations (sections 6.4.1(2)(b) and 6.4.1(2)(c) of proposed Attachment AE).

³⁶ Section 1.1.3a of Attachment AE defines "Controllable Load" as:

A registered, measurable load that is capable of being reduced at the instruction of the SPP operator and subsequently increased at the instruction of an SPP operator in order to provide a dispatchable quantity in the form of a demand response Resource. A Controllable Load must be associated with a demand response Resource.

³⁷ October 2011 Order, 137 FERC ¶ 61,011 at P 66.

27. Additionally, the Commission required SPP either to define the term “Variable Demand Response Resource” or to replace it in section 1.2.9 of Attachment AE with an appropriate term defined in the Tariff.³⁸

i. SPP’s Filing

28. SPP explains that the phrase “must be associated with a demand response Resource” in the proposed definition of controllable load means a load that is capable of providing energy in the form of demand response in the EIS Market. SPP states that controllable load is a subset of demand response and that other types of demand response may participate in the EIS Market (e.g., demand response facilitated by behind-the-meter generation or a cogeneration resource). SPP explains that, unlike other potential demand response resources, controllable load is a load-based resource that represents an actual load reduction rather than a shift from wholesale generation to generation behind the meter. SPP states that the requirement that controllable load be associated with a demand response resource means that the controllable load must be registered in the EIS Market as a demand response resource to provide demand response when called upon by SPP.³⁹

29. In regard to why SPP proposes to require controllable load to be able to be “subsequently increased at the instruction of an SPP operator in order to provide a dispatchable quantity in the form of a demand response Resource,” SPP contends that this requirement is necessary because the EIS Market is a real-time, energy-only market. SPP explains that the EIS Market is dispatched in five-minute intervals, meaning that a resource that is necessary during one five-minute interval may not be needed in the subsequent interval. Because SPP dispatches demand response resources in lieu of generation resources, SPP contends that it must be able to increase or decrease energy provided (less demand reduction) in real-time to maintain system balance, as would be the case if the resource were a generator. With regard to the question of how SPP would communicate instructions to controllable load to increase or decrease its response, SPP explains that it will communicate those instructions via computer, which is the same manner of communication it employs for other resources.⁴⁰

³⁸ *Id.* P 65.

³⁹ SPP Filing at 12.

⁴⁰ *Id.*

30. SPP proposes modifying section 1.2.9 in Attachment AE by replacing the term “Variable Demand Response Resource” with “Controllable Load associated with a demand response Resource.”⁴¹

ii. Commission Determination

31. We accept SPP’s explanations regarding the use of the term “Controllable Load” in its Tariff. We also find that SPP has satisfied the Commission’s concerns with respect to why SPP substituted the term “Controllable Load” for the term “demand response” in sections 1.2.9 and 1.2.10 of Attachment AE, as well as in SPP’s explanation regarding the interrelationships, roles, and responsibilities between controllable load and demand response resources.⁴² We will also accept SPP’s revision to section 1.2.9 of Attachment AE because the term “Controllable Load” is a term defined in the Tariff (specifically, in section 1.13a of Attachment AE).

32. The definition of “Controllable Load” in SPP’s Tariff requires the load in question to have the ability to be “subsequently increased at the instruction of an SPP operator in order to provide a dispatchable quantity in the form of a demand response Resource.” We view this provision as requiring a demand response resource whose demand response is associated with actual load reduction to be able to respond to an SPP dispatch instruction to return to normal operating conditions (i.e., not providing demand response) within five minutes. If SPP intends this provision to operate differently, then it must explain its intention in a compliance filing due within 60 days of the date of issuance of this order.

2. General Compliance Requirements

a. Resource Plans

33. In the October 2011 Order, the Commission required SPP to explain why it is necessary for a demand response resource to submit a daily Resource Plan⁴³ when that

⁴¹ *Id.* at 6-7.

⁴² *See supra* P 16.

⁴³ Section 1.1.30 of Attachment AE in SPP’s Tariff defines a Resource Plan as “A Market Participant’s plan to meet its energy obligations including specification of Resource operating characteristics.” SPP uses Resource Plans to assess resource and ancillary service adequacy for the SPP region, each SPP control area, and each market participant. Market participants with registered resources are required to submit Resource Plans daily, with the first submittal for an operating day occurring by 1100 hours on the day preceding the operating day. A Resource Plan covers a period of

(continued...)

resource is not available to provide demand response during an operating day and for the next six days specified in the Resource Plan. The Commission required SPP to address the need for such submissions under these circumstances (i.e., during stretches of inactivity as a demand response resource) and discuss whether this practice could become a barrier to demand response resource participation in the SPP market.⁴⁴

i. SPP's Filing

34. SPP states that it requires all resources, including demand response resources, to submit a Resource Plan. SPP explains that these plans provide information regarding a resource's availability, minimum and maximum capacity, ramp rate, and status. SPP asserts that, because it only operates a real-time energy imbalance market at this time, access to resource-specific information in the Resource Plan is necessary for reliable operation of the market. SPP explains that, when a resource fails to submit a Resource Plan, SPP utilizes the resource's most recently-submitted Resource Plan until the resource submits a new plan. SPP asserts that this creates significant reliability issues if a resource is unavailable.⁴⁵

35. Further, SPP contends that the requirement to submit a daily Resource Plan does not constitute a barrier to demand response participation in its EIS Market. SPP explains that a Resource Plan only requires basic information about the resource's availability, capacity, ramp rate, and status, and the Resource Plan may be submitted through the internet or on an automated basis. In addition, for demand response resources, SPP states minimum capacity values are set to zero by default. Accordingly, SPP does not view the requirement to provide a daily Resource Plan as overly burdensome. SPP also notes that demand response resources already participating in its EIS Market currently submit Resource Plans, and this requirement does not appear to constitute a barrier to entry.⁴⁶

seven days (with hourly detail), with the first being the operating day. Market participants with registered resources are required to keep the plan up to date throughout the operating day, and market participants may update data for individual hours until 45 minutes prior to the operating hour. SPP EIS Market Protocols, Revision 33.0, §§ 3.2-3.4.

⁴⁴ October 2011 Order, 137 FERC ¶ 61,011 at P 45.

⁴⁵ SPP Filing at 8-9.

⁴⁶ *Id.* at 9.

ii. Commission Determination

36. We are satisfied by SPP's explanation of the requirement that demand response resources submit a Resource Plan in order to provide for the reliable operation of its real-time energy imbalance market. SPP has sufficiently demonstrated that the technical requirements for Resource Plans, as well as the means of submission, should not overly-burden market participants with demand response resources during long stretches of inactivity.

b. Collection of Availability Data for Dispatch

37. The Commission required SPP to clarify how it collects availability data for dispatch after finding the phrase "must be able to submit real-time response data" to be unclear. Specifically, the Commission found that SPP did not specify what the demand response resource must provide in terms of metering and that SPP did not specify procedural requirements to submit real-time response data. The Commission also questioned whether the SPP Market Protocols reflected these procedures, as SPP merely stated that the process for collecting availability data for dispatch for demand response is "similar" to that for generation resources.⁴⁷

i. SPP's Filing

38. According to SPP, it collects availability data for dispatch by requiring all resources to submit a Resource Plan that identifies the resource's availability for dispatch. With respect to the submission of real-time response data, SPP states that it requires demand response resources—like all resources—to be able to submit data in real-time using ICCP. Because its EIS Market is a real-time, energy-only spot market, SPP asserts that it is critical to be able to determine a resource's response in real-time so that SPP can operate the market reliably. SPP explains that, because demand response resources are deployed in real-time in lieu of generation resources, SPP must be able to determine a demand response resource's response in real-time. SPP asserts that it designed its real-time data requirements to provide SPP with the necessary information to operate the EIS Market reliably, without imposing onerous requirements on market participants.⁴⁸

⁴⁷ October 2011 Order, 137 FERC ¶ 61,011 at P 46.

⁴⁸ SPP Filing at 9-10.

ii. Commission Determination

39. We accept SPP's clarifications regarding the collection and use of real-time data submission through ICCP. We find that this data collection is reasonable to determine all types of resources' responses in real-time so that SPP can operate its EIS Market reliably and does not appear to be overly burdensome to demand response resources.

c. ARC Aggregation Requirements

40. In the October 2011 Order, the Commission required SPP to explain the meaning of "electrically equivalent point" and to clarify whether multiple resources can be associated with a particular electrically equivalent point. The Commission also found that it was unclear whether a location can have demand response from more than one retail provider.⁴⁹ Moreover, the Commission found that SPP's requirements that an ARC resource have a single retail provider and be at a single electrically equivalent point (depending on the definition) could unnecessarily limit demand response. The Commission stated that SPP's requirements could result in ARCs being treated in a non-comparable manner by unnecessarily restricting the ability of aggregators to participate in the market. The Commission required SPP to either remove these requirements or justify the need for them in its compliance filing. Additionally, the Commission found SPP's 1 MW minimum for bids and offers in the EIS Market to be unclear in its application to demand response. Thus, the Commission required SPP to identify the portion of an ARC's aggregated resource(s) to which the 1 MW limitation would apply and why. The Commission found it unclear whether SPP applied the 1 MW minimum to individual resources of a demand response provider (such as those of an ARC) or to combined resources provided by that market participant.⁵⁰

i. SPP's Filing

41. SPP explains that by "electrically equivalent," it means a point at which the controllable load is connected to the SPP wholesale transmission system. SPP states that multiple, individual resources may be located at an electrically equivalent point. However, resources located in close proximity to one another may not be "electrically equivalent," depending on how they are connected and how their energy is delivered to

⁴⁹ October 2011 Order, 137 FERC ¶ 61,011 at P 47.

⁵⁰ *Id.* PP 48-49.

the grid. Specifically, SPP contends that electrical equivalence requires delivery to the grid at the same voltage level.⁵¹

42. SPP asserts that demand response resources at a single location must be served by the same retail provider to enable SPP to determine which load must be adjusted. SPP explains it performs an adjustment⁵² to reported load at locations where demand response has been dispatched to eliminate potential double-counting and to ensure that the load-serving entity whose customer is providing the demand response is not subject to over or under-scheduling charges.⁵³

43. SPP asserts that the locational requirement for ARCs is necessary for SPP to manage the reliability of its system and address congestion. Given the locational nature of congestion and the need for SPP to dispatch resources to address congestion in certain areas of its market, SPP emphasizes the importance of being able to identify the location of a resource. According to SPP, if an ARC were permitted to bid the controllable load of multiple retail customers in different locations as a single demand response resource, SPP could not rely on the ARC's total market-wide aggregated demand response to address congestion in a specific location. This would be particularly true of any portion of the ARC's resources located remotely from the congestion. However, SPP notes that this locational requirement does not affect the ability of an ARC to represent multiple retail customers across the SPP region, provided that these customers are organized into demand response resources based on electrical location.⁵⁴

⁵¹ SPP uses the example of a generating plant with two units—one connected to the grid at 138 kV and the other at 345 kV—to demonstrate that these two units, while physically co-located, would not be electrically equivalent. SPP explains that, because these two units are connected to the grid at different voltage levels, they have different impacts on the grid. SPP Filing at 10.

⁵² We note that in the order issued on January 19, 2012 on SPP's initial Order No. 745 compliance filing, the Commission rejected SPP's proposed demand response cost allocation methodology for cost-effective hours (i.e., at or above the cost-effectiveness threshold, as established by a net benefits test), finding that the adjustment described by SPP would result in the host load-serving entity being the only party allocated the costs of paying demand response resources. *Southwest Power Pool, Inc.*, 138 FERC ¶ 61,041, at P 30 (2012).

⁵³ SPP Filing at 10-11.

⁵⁴ *Id.* at 11.

44. SPP explains that the current 1 MW minimum requirement applies at the SPP wholesale metering point (i.e., the electrically equivalent point). SPP states that a market participant—including an ARC—may combine multiple, smaller resources into a single resource that meets the 1 MW minimum requirement, provided that all of the resources are located at the same wholesale metering point. SPP contends that the 1 MW minimum is due to a system limitation that will not exist in SPP’s Integrated Marketplace.⁵⁵

ii. Commission Determination

45. We find that SPP has not provided sufficient justification for us to find that its “electrically equivalent point” ARC aggregation requirement is just and reasonable. SPP states that this aggregation requirement, which implies a locational focus at the nodal level, is necessary for it to manage localized congestion. We recognize the importance of that goal. However, we remain concerned that SPP is imposing a requirement that may unnecessarily restrict the ability of ARCs to effectively and efficiently aggregate demand response for participation in the SPP market. Further, we note that SPP will require the demand response resource to identify the resource’s settlement location on both Resource Plans and offer curves.⁵⁶ We note that most RTOs and ISOs effectively manage localized congestion while allowing ARCs to aggregate smaller retail customers into a demand response resource on a sub-regional basis, such as within a local balancing authority area, transmission zone, or load zone.⁵⁷

46. We also recognize that SPP’s ARC aggregation requirements may be affected by EIS Market software limitations. However, given SPP’s planned transition to the Integrated Marketplace, and the Commission’s granting of SPP’s request to delay implementation of key measurement and verification provisions until launch of the Integrated Marketplace, SPP should be able to revisit its ARC aggregation requirements. Accordingly, we will require SPP to include, as part of the compliance filing due 60 days after the issuance of this order, a discussion of: (1) whether software or modeling limitations have necessitated that aggregations be at an electrically equivalent point in the EIS Market, (2) whether SPP has considered alternative ARC aggregation requirements

⁵⁵ *Id.*

⁵⁶ To the extent this affects settlement, we note that the Commission has already rejected SPP’s proposal to allocate demand response costs only to the host load-serving entity during cost-effective hours in the Commission’s order on SPP’s initial Order No. 745 compliance filing.

⁵⁷ *See, e.g.*, MISO Tariff, Module C § 38.6; PJM Tariff, Attachment K, PJM Emergency Load Response Program; NYISO Tariff, Attachment G § 22.2.

that permit aggregation on a sub-regional level while allowing SPP to manage localized congestion, (3) whether SPP considers a broader aggregation requirement feasible for its EIS Market and for the Integrated Marketplace, and (4) whether SPP intends to broaden its aggregation requirements as it implements the Integrated Marketplace and, if so, a timeline for implementation. We will also require SPP to explain, in the compliance filing due 60 days after the issuance of this order, the continued necessity of the aggregation requirement that an ARC resource have a single retail provider.

47. We accept SPP's explanation that the 1 MW minimum applies to the combined set of resources in an aggregation and not to each individual resource comprising the aggregation. We also find that the 1 MW minimum is just and reasonable based on current system limitations.

d. ARC Certification Requirements

48. The Commission required SPP to clarify within section 1.2.2(i) of Attachment AE that certification for ARCs requires meeting the requirements in section 1.2.10 of Attachment AE.⁵⁸

i. SPP's Filing

49. SPP proposes adding language to section 1.2.2(i)⁵⁹ of Attachment AE requiring ARCs to certify the eligibility of their retail customers on the basis of the distinction adopted in section 1.2.10 of Attachment AE.⁶⁰

⁵⁸ October 2011 Order, 137 FERC ¶ 61,011 at P 78. As specified in section 1.2.10 of Attachment AE, there are further limitations pertaining to ARCs and the aggregation of small utility customers such that the ARC can aggregate, when not precluded by the laws or regulations of the relevant electric retail regulatory authority, controllable load of end-use customers of utilities that distributed more than 4 million MWh in the previous fiscal year. In the case of utilities with distribution totals under this level, section 1.2.10 provides that the relevant electric retail regulatory authority must affirmatively permit such demand response to be bid into the EIS Market.

⁵⁹ On December 2, 2011, in Docket No. ER12-528-000, SPP submitted a filing proposing revisions to section 1.2.2 of Attachment AE, requesting a January 1, 2012 effective date. SPP explains that, because it is requesting a December 5, 2011 effective date in the current filing, it is submitting two versions of section 1.2.2 with different effective dates. SPP Filing at n.37.

⁶⁰ *Id.* at 7.

ii. Commission Determination

50. We will accept the modification to section 1.2.2(i) of Attachment AE because it satisfies the compliance requirement specified in the October 2011 Order.

e. Definition of Market Participant

51. The Commission required SPP to modify the definition of “Market Participant” so that it included only those retail customers not precluded by law or regulation from participating directly in SPP’s EIS Market.⁶¹

i. SPP’s Filing

52. SPP proposes the following modification (underlined text) to part (f) in the definition of “Market Participant” in the Common Service Provisions in Part I of its Tariff:

[A]ny retail customer or eligible person that is not precluded under the laws or regulations of the relevant electric retail regulatory authority including state-approved retail tariff(s) from participating directly in wholesale demand response programs in the EIS Market and that is technically qualified to offer controllable load into the EIS Market or an aggregator of such retail customers that offers qualified controllable load into the EIS Market under Section 1.2.10 of Attachment AE.

ii. Commission Determination

53. We will accept the modification to part (f) in the definition of “Market Participant” because it satisfies the compliance requirement specified in the October 2011 Order. However, we will require SPP to further modify part (f) of the definition of “Market Participant” to use a term more inclusive than controllable load (in the phrase “technically qualified to offer controllable load into the EIS Market”) because the term “controllable load” suggests that this definition does not apply to entities offering other forms of demand response (e.g., demand response facilitated by behind-the-meter generation or a cogeneration resource). We will require SPP to make this modification in a compliance filing due 60 days after the issuance of this order.

⁶¹ October 2011 Order, 137 FERC ¶ 61,011 at P 29.

3. Market Rules Governing Price Formation during Periods of Operating Reserve Shortage

54. In the October 2011 Order, the Commission found that SPP had failed to meet the second, fifth, and sixth criteria laid out in Order No. 719 with respect to price formation.⁶² With respect to the second criterion, the Commission found that SPP had not fully explained the limitations on demand response resources (i.e., associated with a single retail provider and electrically equivalent point) that could affect customers' decisions to invest in demand response technologies.⁶³ The Commission stated it would address this criterion in SPP's subsequent compliance filing once SPP addressed these limitations.

55. With respect to the fifth criterion, the Commission found that SPP had not yet ensured the principle of comparability during periods of operating reserve shortages and required SPP to address this criterion in its compliance filing.

56. With respect to the sixth criterion, the Commission found that SPP had not shown how demand response resources discipline bidding behavior to competitive levels. The Commission required SPP to address this in its compliance filing.⁶⁴

a. SPP's Filing

57. With respect to the fifth criterion, SPP emphasizes that it operates a real-time, energy-only imbalance market and does not currently operate an operating reserve

⁶² The six criteria are: (1) improve reliability by reducing demand and increasing supply during periods of operating reserve shortages; (2) make it more worthwhile for customers to invest in demand response technologies; (3) encourage existing generation and demand resources to continue to be relied upon during an operating reserve shortage; (4) encourage entry of new generation and demand resources; (5) ensure that the principle of comparability in treatment of and compensation to all resources is not discarded during periods of operating reserve shortage; and (6) ensure market power is mitigated and gaming behavior is deterred during periods of operating reserve shortages including, but not limited to, showing how demand resources discipline bidding behavior to competitive levels. Order No. 719, FERC Stats. & Regs. ¶ 31,281 at PP 246-247.

⁶³ SPP's explanations regarding ARC aggregation requirements involving a single retail provider and electrically equivalent point are also meant to satisfy the compliance requirement regarding the second criterion. *See supra* PP 41-43.

⁶⁴ October 2011 Order, 137 FERC ¶ 61,011 at PP 82-84.

market. SPP explains that the EIS Market models demand response resources in the same manner as other resources and dispatches demand response resources in lieu of generation resources. SPP asserts that it does not discard its EIS Market operating and settlement procedures during periods of operating reserve shortages. Therefore, SPP contends that there is no difference between its treatment of demand response resources and ARCs during periods of operating reserve shortages and other periods.⁶⁵

58. With respect to the sixth criterion, SPP asserts that demand response in its EIS Market has the ability to discipline bidding behavior to competitive levels. SPP explains that it currently has approximately 1,500 MW of demand response participating in its EIS Market, producing approximately 5,000 GWh per year.⁶⁶ SPP states that this demand response capacity is the equivalent of two generating plants and is significant given that its current contingency reserve requirement is 1,800 MW. SPP asserts that the demand response currently participating in its EIS Market is of sufficient size to provide almost all of its required contingency reserves and thus has the ability to discipline bidding behavior to competitive levels.⁶⁷

b. Commission Determination

59. We cannot address SPP's compliance with the second criterion because we are requiring SPP to further explain, and possibly modify, its ARC aggregation requirements, as discussed above. Accordingly, we will address compliance with the second criterion upon reviewing SPP's compliance submission relating to ARC aggregation requirements.

60. With respect to the fifth criterion, we find that SPP's explanation is satisfactory and that there is comparable treatment between demand response resources and generation resources during periods of operating reserve shortages and other time periods.

61. With respect to the sixth criterion, we find SPP's explanation to be insufficient. SPP's description in this proceeding of the nature and extent of demand response participation in its wholesale market may be inconsistent with data that SPP presented in its May 2, 2012 Order No. 745 compliance filing.⁶⁸ Therefore, we will require additional

⁶⁵ SPP Filing at 17.

⁶⁶ SPP also communicated these figures in its September 2, 2011 informational status report in Docket No. ER06-451-000.

⁶⁷ SPP Filing at 17.

⁶⁸ SPP May 2, 2012 Filing in Docket No. ER11-4105-001 at 12, n.29. In its Order No. 745 compliance filing, SPP explains that demand response from load reductions is

(continued...)

information on the nature and extent of demand response participation in SPP's EIS Market to address this apparent discrepancy and to provide a better understanding of demand response resource participation in the SPP region, which will ultimately aid in our assessment of SPP's compliance with the sixth criterion. Specifically, we will require SPP to provide the following information for the past year: (1) the number of demand response resources registered in the EIS Market; (2) the number of registered ARCs; (3) the amount (MW) of registered demand response resources associated with controllable load; (4) the amount (MW) of registered demand response resources associated with behind-the-meter generation or cogeneration; and (5) the amount (MW) of demand response offered, cleared, and dispatched during periods of operating reserve shortages over the past year, broken into categories for controllable load and behind-the-meter generation. SPP should submit this information in a compliance filing due 60 days after the issuance of this order.

4. Order No. 719-A Compliance Requirements

62. In the October 2011 Order, the Commission found that SPP had not sufficiently addressed Order No. 719-A compliance requirements relating to demand response coordination mechanisms⁶⁹ and directed SPP to address these compliance requirements in its subsequent filing.⁷⁰

a. SPP's Filing

63. SPP explains that when a market participant (including an ARC) registers one or more demand response resources, SPP notifies the relevant electric retail regulatory authority and any affected retail providers of the registration and the expected level of

relatively limited in the SPP region and that, although it has demand response participation from on-site generators of approximately 1400 MW, these generators typically participate directly in the EIS Market by offering their generation as a resource rather than as demand response.

⁶⁹ In Order No. 719-A, the Commission required RTOs and ISOs to develop mechanisms for sharing information about demand response resources with affected load-serving entities, as well as develop and implement protocols allowing ARCs to operate in organized markets, addressing concerns such as double-counting, deviations, underscheduling in the day-ahead market, metering, billing, settlement, information sharing, and verification measures. Order No. 719-A, FERC Stats. & Regs. ¶ 31,292 at PP 67, 69-70.

⁷⁰ October 2011 Order, 137 FERC ¶ 61,011 at P 88.

participation. SPP also notes that in its May 19, 2010 compliance filing, it proposed that when a demand response resource registers and selects the Calculated Methodology, SPP will notify the applicable retail provider and the relevant electric retail regulatory authority of the registration and the expected level of participation.⁷¹ SPP explains that because demand response resources using the Submitted Methodology participate through a retail provider program or as directly-metered behind-the-meter generation, the retail provider is already aware of the resource's participation in SPP. Therefore, SPP states, it limited the notification provisions to demand response resources utilizing the Calculated Methodology.⁷²

64. SPP states that it adjusts the reported load at settlement locations where demand response resources are dispatched to include the demand response resource's production quantity. SPP explains that this load "gross-up" ensures that the load-serving entity for the controllable load associated with the demand response resource is not subject to an over-scheduling penalty because, following the gross-up, the "reported load" at the settlement location includes the production of the demand response resource.⁷³

65. SPP reiterates that controllable load is the load that provides demand response in the form of a load reduction, and the demand response resource is the portion of a controllable load that is modeled as a resource in SPP's market systems. SPP explains that the market participant that registers the demand response resource—whether as an individual demand response resource or as an ARC—is responsible for providing all necessary data, and SPP provides this market participant payment in settlement. SPP states it integrates the five-minute resource response value to an hourly value for use in settlement.⁷⁴

b. Commission Determination

66. We find SPP compliant with the Order No. 719-A requirement involving information sharing about demand response resources with affected load-serving entities. However, we will require SPP to provide more explanation on the verification procedures it has in place or is developing to verify the production quantity of demand response provided by an ARC, in a compliance filing due 60 days after the issuance of this order.

⁷¹ SPP May 19, 2010 Compliance Filing at Exhibit IV, Proposed Attachment AE § 1.2.2(l).

⁷² SPP Filing at 14-15.

⁷³ *Id.* at 14.

⁷⁴ *Id.* at 15.

We will also require SPP to explain in this compliance filing how it will ensure that controllable load associated with a demand response resource is not subject to an over-scheduling penalty in light of the Commission's rejection of the demand response cost allocation methodology for cost-effective hours in SPP's initial Order No. 745 compliance filing (specifically, whether SPP will continue to use the "gross-up" methodology for other purposes).⁷⁵

The Commission orders:

(A) SPP's compliance filing is hereby conditionally accepted for filing, effective December 5, 2011, as discussed in the body of this order.

(B) SPP is hereby directed to submit a compliance filing, within 60 days of the date of this order, as discussed in the body of this order.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

⁷⁵ While the Commission's rejection of this demand response cost allocation methodology for cost-effective hours did not necessarily reject SPP's practice of performing the "gross-up" methodology for other purposes, it is unclear whether SPP intends to continue performing this calculation now that the Commission has rejected SPP's initial demand response cost allocation methodology for cost-effective hours.