UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;
Suedeen G. Kelly, Marc Spitzer,
Philip D. Moeller, and Jon Wellinghoff.

Southwest Power Pool, Inc. Docket No. ER07-319-000

ORDER ON TARIFF FILING

(Issued January 31, 2007)

1. On December 12, 2006, Southwest Power Pool, Inc. (SPP) filed proposed open access transmission tariff (OATT or tariff) revisions pursuant to the Commission's October 31, 2006 Order.[1] In the order, among other things, the Commission directed SPP to submit a new proposal detailing the use of SPP's penalty factor solutions. As discussed below, the Commission finds SPP's proposal to be in compliance with the October 31 Order and will accept, as modified, the proposed tariff revisions to become effective February 1, 2007 or such later date as SPP's energy imbalance service market (imbalance market) becomes effective.

I. Background

2. SPP has been authorized as a regional transmission organization (RTO) since October 1, 2004.[2] The Commission accepted SPP's commitment to develop an imbalance market, including implementation of a real-time, offer-based energy market that will be used to calculate the price of imbalance energy.[3]

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[1] *Southwest Power Pool, Inc.*, 117 FERC ¶ 61,139 (2006) (October 31 Order).

[2] *See Southwest Power Pool, Inc.*, 109 FERC ¶ 61,009 (2004) (*RTO Order*), *order on reh'g*, 110 FERC ¶ 61,137 (2005).

[3] *Southwest Power Pool, Inc.*, 106 FERC ¶ 61,110 at P 134, *order on reh'g*, 109 FERC ¶ 61,010 (2004).

3. On June 15, 2005, SPP submitted proposed tariff revisions intended to implement an imbalance market and establish a market monitoring and market power mitigation plan (June 15 Filing). The Commission rejected SPP's original imbalance market proposal and mitigation and monitoring plan in the June 15 Filing as inadequate and provided guidance concerning: (1) reliable and stable market operations; (2) market-based rates in the new market; and (3) mitigation and monitoring issues.[4]

4. Subsequently, on January 4, 2006, SPP resubmitted proposed tariff revisions intended to implement least cost bid-based security constrained economic dispatch and locational marginal pricing, including provisions allowing the bidding, scheduling and dispatch of generating units (January 4 Filing). In the *SPP Market Order*, the Commission accepted parts of SPP's market operations and monitoring proposal in its January 4 Filing and directed SPP to submit a compliance filing. The Commission also found that SPP's proposal in the January 4 Filing was missing important elements and assurances regarding reliable and stable operation and therefore directed submission of the missing elements and additional readiness and market startup safeguards.[5] The Commission suspended the January 4 Filing and permitted it to become effective October 1, 2006,[6] subject to further orders as discussed in the *SPP Market Order*.

5. In the *SPP Market Order*, among other things, the Commission directed SPP to file, on an informational basis, independently evaluated metrics related to commercial operations readiness and the testing plan no later than 60 days prior to imbalance market start-up.[7] On September 1, 2006, SPP submitted a compliance filing that included market readiness metrics. In the October 31 Order, the Commission determined that SPP had complied with the *SPP Market Order*. However, the Commission expressed concern that SPP may take actions to manage the imbalance market outside of the provisions in the

[4] *Southwest Power Pool, Inc.*, 112 FERC ¶ 61,303 (September 19 Order), *reh'g denied*, 113 FERC ¶ 61,115 (2005).

[5] *Southwest Power Pool, Inc.*, 114 FERC ¶ 61,289, at P 1-3 (*SPP Market Order*), *order on reh'g*, 116 FERC ¶ 61,289 (2006).

[6] SPP delayed its imbalance market implementation several times. At its December 12, 2006 meeting, SPP's Board approved certification of SPP's readiness for a February 1, 2007. On December 22, 2006, SPP filed a market readiness certification stating that the imbalance market is ready to start on February 1, 2007 (Docket No. ER06-451-017).

[7] *SPP Market Order*, 114 FERC ¶ 61,289 at P 23.

SPP OATT and Market Protocols, and cautioned SPP that its actions must be in accord with terms, conditions, and rates on file under the Federal Power Act (FPA).[8] Therefore, the Commission directed SPP to file a tariff detailing how its penalty factor solutions[9] would or would not be used to make dispatch instructions to market participants as well as their use in setting prices, if indeed the penalty factors are used in the dispatch process.[10]

II. Description of Filing

6. In the instant filing, SPP submits proposed revisions to its OATT to address the Commission's concern regarding the need for tariff provision detailing SPP's penalty factor solutions in the October 31 Order. Specifically, SPP states that section 4.1 of Attachment AE is revised to include the process SPP uses in setting the relaxation of operating limits, VRLs, on its transmission system. SPP states that a VRL sets the point at which the exclusive use of generator dispatch to resolve an operational issue is relaxed to allow other operational solutions. Also, SPP states that section 4.1 is revised to exempt from uninstructed deviation charges generating resources responding to dispatch instructions that differ from the reported capabilities in the Resource Plan based on the application of a VRL.[11]

7. In addition, SPP states that a new section 4.6 is added to Attachment AE to detail VRL values. According to SPP, VRL values will be used to determine the point at which the deployment considers operational options to balance system injections and withdrawals that involve violation of limiting factors. Moreover, SPP states that, at least annually, it will analyze the effect of VRL values on reliability and pricing above the safety-net offer cap. Initial VRL values will be developed based upon an analysis of data generated through deployment tests. If the VRL values compromise reliability or allow frequent pricing substantially above the safety-net offer cap, SPP states that it will

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[8] October 31 Order, 117 FERC ¶ 61,139 at P 25.

[9] Penalty factors or Violation Relaxation Limits (VRLs) are a means by which SPP's least-cost security constrained economic dispatch program can choose to exceed an operating limit in the dispatch solution rather than dispatching generation resources at costs above a certain set point. This is done in a manner consistent with reliability requirements.

[10] October 31 Order, 117 FERC ¶ 61,139 at P 25.

[11] SPP Transmittal at 3.

recommend new VRL values to the SPP membership for approval as specified in the SPP's Market Protocols.[12]

8. SPP also maintains that the proposed revisions will provide SPP with authority to dispatch directly, as necessary, to avoid extreme prices that may result if the shift factors associated with the generating resources that can respond to security constrained, least-cost system dispatch are relatively low, and to ensure a programmatic solution in all cases. SPP adds that VRL's current values will be posted on SPP's OASIS and that the posted VRLs will set the points at which the deployment algorithm considers operational options to balance system injections and withdrawals. The tiered VRL values reflect the relative priority for enforcing the limiting factors.[13]

9. According to SPP, if SPP is unable to achieve the market flow relief required by the North American Electric Reliability Council Interchange Distribution Calculator (NERC IDC) to address a Transmission Loading Relief (TLR) or Curtailment Adjustment Tool (CAT) event on a constrained flowgate within 30 minutes, SPP will initiate within one business day after this occurrence the analysis described above. If SPP determines through its analysis that a VRL or its associated value needs to be adjusted to allow SPP to achieve market flow relief within 30 minutes in the future if a TLR/CAT event is called, SPP states that it may adjust the VRL values without approval while seeking SPP membership approval as specified in the Market Protocols.

10. Finally, SPP states that SPP requests that the Commission waive its 60 day notice requirement to permit a February 1, 2007 effective date to coincide with its planned imbalance market start.[14]

III. Notice of Filing and Responsive Pleadings

11. Notice of SPP's filing was published in the *Federal Register*, 71 Fed. Reg. 78,176 (2006), with interventions and protests due on or before January 2, 2007. On January 2, 2007, Redbud Energy LP (Redbud) filed a motion to intervene and comments in support

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[12] *Id*. SPP notes that it has revised its Market Protocols to address the operation of VRLs.

[13] *Id.*

[14] *Id.* 3-4.

of SPP's filing.[15] On January 3, 2007, the Missouri Joint Municipal Electric Utility Commission, the Oklahoma Municipal Power Authority, and the West Texas Municipal Power Agency (collectively, TDU Intervenors) filed a motion to intervene. Also, on January 3, 2007, Westar Energy, Inc. and Kansas Gas and Electric Company (jointly, Westar) and Golden Spread Electric Cooperative, Inc. (Golden Spread) filed motions to intervene and protest SPP's filing in this proceeding. On January 18, 2007, SPP filed an answer to the protests (SPP Answer) and Redbud filed an answer to Golden Spread's protest..

12. Golden Spread argues that SPP's request for approval of authority to use VRLs in its market casts doubt on whether the implementation of a market is appropriate in the SPP footprint.[16] Specifically, it claims that SPP is seeking to address transmission constraints and other issues administratively through the use of VRLs when the Commission has already determined that SPP's mitigation measures and monitoring plan are sufficient to protect customers from the exercise of market power that might occur in the energy imbalance market when transmission constraints bind.[17] This is proof, Golden Spread argues, that SPP is not confident that its mitigation measures and monitoring plan will be sufficient to protect customers. Golden Spread asserts that when transmission constraints make certain segments of the market non-competitive, SPP's solution will be to: (1) relax reliability standards and (2) pay generators amounts that exceed the price cap to obtain energy for the constrained area. Golden Spread also states that SPP does not propose some higher specified capped payment, and, in fact, the proposed tariff change fails to state the prices that will be paid, the manner in which those prices will be calculated, or the criteria by which it will be determined that a VRL will be applied. Golden Spread claims that this amounts to SPP asking the Commission to approve deregulation, and it cannot be concluded that SPP's proposed tariff is just and reasonable.[18]

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[15] Redbud states that it supports SPP's tariff filing and requests the Commission to accept it as in compliance with the Commission's directive in the October 31 Order. It states that SPP's proposal is reasonable because it provides a detailed explanation of the use of VRL as it relates to the imbalance market. Redbud Comments at 2.

[16] Golden Spread Protest at 3-4.

[17] *SPP Market Order*, 116 FERC ¶ 61,289 at P 55.

[18] Golden Spread Protest at 4.

13. Golden Spread also argues that a significant degree of subjectivity may affect the decision whether to apply VRLs and that smaller entities, such as itself, may be subject to more VRL actions than larger entities with generation market power, and may have no alternative than to rely on the imbalance market. Because of SPP market rules, this can expose market participants to significant risks that cannot be hedged, leading to exorbitant rates based neither on cost or market forces.[19]

14. Moreover, Golden Spread states that a generator is compensated when it is pushed to exceed its ramp rate, but there is no requirement that generators report ramp rates that are indicative of normal machine capability. Thus, it argues that the tariff may encourage reporting of lower than normal ramp rates in order to collect VRL-related windfall profits.[20] Golden Spread also asserts that it is unreasonable to reward a transmission owner for violating limits, and if a VRL must be applied because of a deficiency in Southwestern Public Service Company's (SPS) system, it will only provide a disincentive for SPS to expand its transmission facilities.[21]

15. Westar and Golden Spread claim that SPP's proposal is inadequate to comply with the Commission directives in the October 31 Order. They assert that the proposal merely introduces a general summary of VRLs without providing the necessary details on how penalty factor solutions/VRLs would or would not be used to issue dispatch instructions.[22]

16. Additionally, Westar urges the Commission to direct SPP to remedy the information gap prior to the start-up of the imbalance market by: (1) supplementing the Market Protocols, in addition to filing sections 9.1.1, 9.1.2 and 9.1.3 of the Market Protocols with the Commission, to provide greater detail about the VRLs, specifically "Resource Ramp Rate Limits," "Market Balance," and "Pnode Constraint;" (2) providing initial VRL values to be used on the first day of the imbalance market, along with detailed support regarding how the initial values are derived; (3) better explaining how pre-operations data provided by balancing authorities may be adjusted to establish VRLs (*e.g.*, balancing authorities need to understand whether SPP's adjustments may require balancing authorities to have more spinning reserves on hand to compensate for SPP

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[19] *Id.* 6.

[20] *Id*. 7.

[21] *Id*. 7-8.

[22] Golden Spread Protest at 6; Westar Protest at 4.

adjustments to the data the balancing authorities provide to SPP); and (4) notifying market participants and balancing authorities, in real-time, whether SPP's market solution is using VRLs so that they can respond in real-time to SPP adjustments via VRLs to better maintain reliability.[23]

17. Westar and Golden Spread also argue that VRL values can significantly affect rates, and the Commission should require SPP to file any proposed changes under section 205 of the Federal Power Act.[24]

18. In addition, Westar requests that the Commission require SPP to file the detailed post-start-up reports provided under the Market Protocols to the SPP Operating Reliability Working Group (ORWG) and Market Working Group (MWG) with the Commission at least quarterly during the first 12 months of the imbalance market.[25] Westar also requests that the Commission require SPP to augment these reports to include explanations of any extraordinary actions taken by SPP to implement the VRLs, the effect of VRLs on Control Performance Standards, and the effect of VRLs on operations. Lastly, Westar states that SPP should include notations in its settlement statements to indicate when settlement has been adjusted to reflect the application of VRLs.[26]

19. In its answer, SPP claims that protests by Westar and Golden Spread are predicated, in large part on erroneous assumptions concerning the purpose and operation of VRLs. SPP states that the use of VRLs do not contribute to increasing price, but serve to moderate prices that would otherwise result from a resource deployment-only solution.[27] Likewise, VRLs are static values, not subject to manual manipulation and create dispatch instructions without SPP exercising discretionary approval.[28] SPP also states that it is willing to accommodate Westar's request for additional information and will also agree to filing informational quarterly reports.

[23] Westar Protest at 7-8.

[24] Golden Spread Protest at 5; Westar Protest at 5.

[25] Westar Protest at 8.

[26] *Id*.

[27] SPP Answer at 4-5.

[28] *Id*. at 6.

IV. Discussion

A. Procedural Matters

20. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2006), the timely, unopposed motion to intervene serve to make the entity that filed it a party to this proceeding.

21. Rule 213(a)(2) of the Commission’s Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2005), prohibits answers to protests 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. However, we are not persuaded to accept Redbud’s answer to Golden Spread’s protest and will therefore reject it.

B. Commission Determination

22. As discussed below, the Commission will accept SPP’s VRL proposal, to be effective February 1, 2007 or such later date as SPP’s imbalance market becomes effective, subject to modifications discussed herein. While intervenors protest certain aspects of SPP’s proposal, we find SPP’s VRL proposal to be just and reasonable because it will act to mitigate prices and ensure a least-cost security constrained dispatch solution in all cases. We also grant SPP’s request for waiver of the 60-day notice requirement to allow SPP’s tariff provisions on VRLs to coincide with the start of its market as this will provide timely clarity to participants in SPP’s new imbalance market.[29]

23. We note that penalty factors/VRLs are a specific technique that permits a solution to the linear optimization program when performing a least-cost security constrained economic dispatch. Instead of putting hard constraints on flowgates or reserve capacity, the dispatch software puts flexible constraints with dollar values associated with exceeding the flexible limit. For example, if a transmission line has a rated limit of 100 MW, the optimization software could include a penalty factor that states the calculated dispatch of the transmission line can exceed the 100 MW limit if the value of exceeding that limit is greater than $2,000/MWh, a pre-established amount. As such, the shadow

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[29] *See Central Hudson Gas & Electric Corp.*, 60 FERC ¶ 61,106*, order on reh’g*, 61 FERC ¶ 61,089 (1992).

price (reflecting the marginal value of the transmission line) would never exceed the pre-established amount.[30]

24. VRLs can be used as an optimization technique to achieve a feasible solution and to indicate that further actions by the transmission operator are required to ensure reliable operations. Alternatively, as proposed by SPP, VLRs can be used to indicate that the system dispatch would be more efficient by violating a flexible constraint for a certain period of time while still meeting all reliability requirements, rather than paying high redispatch costs or curtailing load.[31]

25. The Commission disagrees with Golden Spread's contentions. While the Commission agrees additional detail is needed as noted below, acceptance of application of VRL limits does not constitute deregulation. Nor will VRL limits themselves cause higher prices as Golden Spread alleges. VRLs are used to permit a dispatch solution and will not be used to set prices. We also do not find a connection between ramp rate violation and the locational imbalance prices (LIPs) that result after a solution is implemented. Under the market rules, generators will be compensated not on VRL values, but on LIPs, which are not calculated from VRLs. Similarly, we do not find VRLs as a threat to reliability. As SPP highlights in its answer, SPP as a reliability coordinator, cannot relax reliability standards. While it may relax some operating limits, it cannot violate NERC reliability standards and has not proposed to do so here.[32] SPP's proposal (new section 4.6) requires review of VRL values at least annually, with immediate review if SPP is unable to meet the NERC reliability standard of achieving reductions on constrained flowgates within 30 minutes when requested to do so.[33]

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[30] We note, as clarified below, that the increase in the limit is permissible so long as it does not trigger a violation of reliability standards.

[31] Further, VRLs can also be used in the calculation of nodal prices. For example, penalty factors on operating reserves can be used as a demand curve for reserves in determining prices during scarcity conditions. *See New England Power Pool and ISO New England Inc.*, 115 FERC 61,175 (2006) (wherein the Commission accepted a proposal that permitted clearing prices to be derived from Reserve Constraint Penalty Factors).

[32] SPP Answer at 5-6.

[33] For added clarity and to comply with NERC reliability standards, we direct SPP to modify section 4.6(c) to state that the condition noted here does not violate any NERC reliability standards.

26. We agree with Westar and Golden Spread that SPP did not fully comply with the Commission's directive to provide details on how VRLs would or would not be used to issue dispatch instructions. Accordingly, as set forth below and as offered by SPP, we direct SPP to provide additional details. We agree with Westar and Golden Spread that provisions of the Market Protocols should be part of the OATT. Accordingly, we direct SPP to incorporate sections 9.1.1, 9.1.2, and 9.1.3 of the Market Protocols into its OATT and submit a compliance filing within 30 days of the date of this order. We also accept SPP's offer to file the requested post-start up reports, and provide the information on Control Performance Standards, the number and duration of each VRL event to market participants. In addition, we accept SPP's offer to indicate on market participants' settlement statements notations for adjustments from the application of VRLs once a system enhancement is complete. However, we will not require SPP to file its initial or subsequent VRL values because these values do not significantly affect rates and may require adjustment in the event of reliability concerns. VRLs do not set prices, rather they are values/inputs in SPP's least-cost economic dispatch program and as such are analogous to generator operating characteristics and other system operating attributes that are inputs to such programs but are not typically filed.

27. In response to Westar's request for real-time notification by SPP when SPP is using VRLs, SPP explains that the real-time capability does not exist since the dispatch algorithm produces and transmits dispatch instructions without SPP personnel interaction.[34] Consistent with this explanation, and SPP's offer to report to the stakeholders on the number and duration of each event, we decline to mandate that SPP develop the real-time capability.

The Commission orders:

(A) SPP's newly proposed tariff provisions are hereby accepted, as modified, to become effective February 1, 2007, or such later date as SPP's imbalance market becomes effective.

[34] SPP Answer at 9.

(B) SPP is hereby directed to make 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)

Magalie R. Salas,
Secretary.