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. ER06-451-001

ORDER ON REHEARING

(Issued September 26, 2006)

1. This order addresses requests for rehearing of the Commission's March 20, 2006 order[1] addressing Southwest Power Pool's (SPP) proposed revisions to its open access transmission tariff (OATT or tariff). In the *SPP Market Order*, the Commission rejected in part, conditionally accepted and suspended in part for five months, to be effective October 1, 2006, SPP's filing intended to implement a real-time energy imbalance service market (imbalance market) and establish a market monitoring and market power mitigation plan.[2] As discussed below, we deny rehearing in part and grant rehearing in part.

I. Background

2. SPP has been authorized as a regional transmission organization (RTO) since October 1, 2004.[3] The Commission accepted SPP's commitment to develop an

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[1] *Southwest Power Pool, Inc.*, 114 FERC ¶ 61,289 (2006) (*SPP Market Order*).

[2] *Id.* at P 1.

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

imbalance market, including implementation of a real-time, offer-based energy market that will be used to calculate the price of imbalance energy.[4] The Commission also required SPP to provide market monitoring and market power mitigation plans.[5]

3. On June 15, 2005, SPP submitted proposed tariff revisions in Docket No. ER05-1118-000 (June 15 Filing) intended to implement an imbalance market and establish a market monitoring and market power mitigation plan. The Commission rejected 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.[6]

4. On January 4, 2006, SPP again submitted proposed revisions to its OATT to implement SPP's imbalance market and establish market monitoring and market power mitigation plans (January 4 Filing). With these revisions, SPP intended to implement a real-time energy imbalance market, based on the least cost bid-based security constrained economic dispatch and locational marginal pricing (LMP). The Commission found that 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.[7] The Commission accepted parts of SPP's market operations and monitoring proposal, rejected parts, and directed SPP to submit a compliance filing. The Commission suspended SPP's filing and permitted it to become effective October 1, 2006, subject to further orders.[8]

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

[5] *Id.* at P 173. Recognizing that SPP planned to implement its imbalance market in three phases, the Commission directed SPP to file its market monitoring plan no later than 60 days prior to implementing Phase 3 of its imbalance market.

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

[7] *SPP Market Order*, 114 FERC ¶ 61,289 at P 1-3.

[8] On August 2, 2006, SPP submitted a letter indicating that the Board of Directors adopted a motion to delay the start of its imbalance market until November 1, 2006.

5. Golden Spread Electric Cooperative, Inc. (Golden Spread), Southwest Industrial Customer Coalition (Southwest Industrials), and the Missouri Joint Municipal Electricity Utility Commission, Oklahoma Municipal Power Authority and West Municipal Power Agency (collectively, TDU Intervenors) requested rehearing of the *SPP Market Order*.

II. Requests for Rehearing

A. Market Mitigation

6. In the *SPP Market Order,* the Commission accepted SPP's proposal to limit mitigation for economic withholding to generators that have a significant impact on a constraint, when the constraint is active.[9] SPP proposed to apply an offer cap during transmission constraints to bids from generators on the importing side of transmission constraints that have a generator-to-load distribution factor of five percent or greater.[10] The Commission found the use of generator-to-load distribution factor reasonable because the distribution factors are determined by the market model, reflects the configuration of the SPP grid, and allows SPP to address market power where well-defined structural barriers to competition exist.[11]

7. The Commission also accepted SPP's proposal to base its offer cap on the costs of new entry. The Commission found this to be reasonable because the premise of not mitigating below the cost of entry ensures that the mitigation will not suppress prices and deter needed investment in new supply.[12] Moreover, the Commission was not convinced by the protesters' arguments and rejected their claims that SPP's proposal does not protect against the exercise of market power or that SPP should adopt a marginal cost plus 10 percent capping measure. Instead, the Commission stated that the proposal

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[9] *SPP Market Order*, 114 FERC ¶ 61,289 at P 168. SPP did not propose, and the Commission did not require, mitigation provisions to address physical withholding.

[10] For example, SPP will cap the generator's bid when a 100 MW increase in that generator's output reduces flowgate imports by 5 MW or more.

[11] *SPP Market Order*, 114 FERC ¶ 61,289 at P 169.

[12] *Id.* at P 171.

would provide benefits in areas with persistent transmission constraints by giving entities serving load in those areas an appropriate incentive against relying too heavily on the short-term imbalance market.[13]

8. Additionally, the Commission accepted SPP's proposed offer cap formula, calculated by spreading the generic capital and operating costs of a new natural gas-fired combustion turbine over the annual hours of transmission constraints for each individual transmission element.[14] Although the formula did not take into account revenues that a new peaking generator would receive in the imbalance market and through other power transactions, the Commission found the SPP formula to be similar to the Midwest Independent Transmission System Operator, Inc.'s (Midwest ISO) methodology approved by the Commission.[15] However, the Commission rejected SPP's proposal that the offer cap will never fall below $100/MWh plus variable operating costs of a generic new resource because SPP had not explained this provision or provided any support for the $100/MWh amount.[16] The Commission stated that SPP had not explained why it was necessary to: (1) abandon its new entry theory when transmission is constrained for a significant period of the year or (2) allow a new peaking unit to recover its cost when the annual hours of constraint are 686 hours or less but not recover if more than 686 hours.[17]

9. Further, because SPP proposed only to operate a market for the provision of imbalance service in real time, the Commission did not require that all resources must offer into the SPP imbalance market.[18] Under SPP's day-ahead and hour-ahead resource planning process, load serving entities (LSEs) are required to commit a sufficient level of

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[13] *Id.*

[14] SPP proposed a formula of annual fixed costs divided by annual hours of constraint plus variable non-fuel operations and maintenance (O&M) plus the fuel cost of a generic combustion turbine.

[15] The Commission noted that there are sufficient differences between SPP's proposed mitigation and Midwest ISO's mitigation measures to warrant a slightly different formula in SPP for calculating the offer cap. *See SPP Market Order*, 114 FERC ¶ 61,289 at P 188.

[16] *SPP Market Order*, 114 FERC ¶ 61,289 at P 190.

[17] *Id.*

[18] *Id.* at 172.

deliverable resources to meet their loads. Therefore, the Commission found that the need to protect against the exercise of market power in the imbalance market is offset by each market participant's set of resources designated to serve its load and any reserve needs.[19]

1. Rehearing Request

10. TDU Intervenors and Golden Spread assert that SPP's offer cap mitigation does not protect customers from the exercise of market power or unjust and unreasonable imbalance charges. TDU Intervenors argue that: (1) the offer caps would allow prices that are "virtually unlimited" and well beyond the prices allowed for the provision of imbalances under the *pro forma* OATT; (2) the levels of the offer caps exceed what is needed to support new generation; and (3) the offer caps will produce prices above competitive levels because the offer caps will allow prices to rise above the short-run marginal cost (plus 10 percent) of the last unit dispatched.[20] Golden Spread claims that SPP's offer cap allows an incumbent owner of resources with market power to charge amounts that may be several times higher than its actual costs.[21] Golden Spread also argues that the Commission has failed to justify: (1) an offer cap that guarantees recovery of both fixed and incremental cost of a new peaking unit; and (2) permitting owners of resources in SPP to charge more than the owners of resources in the California ISO markets.[22] Further, Golden Spread argues that the Commission's assertion that a LSE can avoid exposure to the imbalance market is factually unsupported. For example, Golden Spread states that due to an existing agreement, Southwestern Public Service schedules Golden Spread's resources and the agreement may subject Golden Spread to purchases from the imbalance market over which it has no control.[23] Golden Spread states that imbalance prices should be based on short-run marginal costs except when there is actually a shortage of generating capacity relative to demand.[24]

11. TDU Intervenors also state that SPP's proposed offer cap levels are based on an unproven and incorrect premise that developers will finance and build new resources

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[19] *Id.*

[20] TDU Intervenors at 19-20, 22, 29.

[21] Golden Spread at 5.

[22] *Id.* at 7.

[23] *Id.* at 6.

[24] *Id.*

based solely on projected SPP imbalance market revenues.[25] They assert that neither the Commission nor SPP challenged TDU Intervenors' showing in the protest that imbalance market revenues are unlikely to drive new generation entry.[26] Therefore, TDU Intervenors claim that mitigation that uses a marginal cost plus 10 percent offer cap, resulting presumably in lower imbalance prices during times of transmission constraint, would support any needed market entry and that long-term contracts appropriately will serve as the principal mechanism for owners of merchant resources to recover their entry costs.[27] Moreover, TDU Intervenors assert that SPP's proposed offer caps will produce more revenues than necessary to provide incentives to new resource development in SPP.[28]

12. Additionally, TDU Intervenors state that competitive prices in a specific hour should equal the short-run marginal costs of the next unit needed to satisfy market demand rather than the long-run marginal cost or the cost of entry measured by average total costs.[29] TDU Intervenors state that SPP's offer cap incorrectly assumes that demand always exceeds supply in the imbalance market.[30] TDU Intervenors argue that, consistent with PJM's mitigation, SPP's offer cap should be no greater than marginal cost plus 10 percent, given the limited scope and short-term, hourly nature of the imbalance market.[31] While TDU Intervenors agree with SPP that the conduct and impact threshold mitigation used in ISO New England, New York ISO and Midwest ISO are "fundamentally different" approaches to mitigation, they dispute SPP's statement that PJM's marginal cost plus 10 percent mitigation approach is not widely applied and thus not appropriate

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[25] TDU Intervenors at 19-20.

[26] *Id.* at 19.

[27] *Id.* at 21, 28.

[28] *Id.* at 22.

[29] *Id.* at 22-24.

[30] *Id.* at 24.

[31] *Id.* at 26-27, citing *PJM Interconnection, LLC*, 110 FERC ¶ 61,053 at P 25 and n.29; *PJM Interconnection, LLC,* 107 FERC ¶ 61,112, at P 36-37 (2004); *Remedying Undue Discrimination Through Open Access Transmission Service and Standard Electricity Market Design*, Notice of Proposed Rulemaking, 67 Fed. Reg. 55,451 (Aug. 29, 2002), FERC Stat. & Regs. ¶ 32,563, at P 403 (2002).

for broad application in SPP.[32] TDU Intervenors also endorse scarcity pricing whereby imbalance price are administratively set to a predetermined level when operating reserves are used to meet demand.[33]

13. TDU Intervenors state that the Commission has not shown abuse of the imbalance service nor provided any other basis for accepting an imbalance price that varies from the usual disincentive to lean on imbalance service, *i.e.*, \$100/MWh or 110 percent of incremental costs for imbalances outside of the 1.5 percent/2 MW deadband.[34]

14. Additionally, TDU Intervenors assert that it is impractical for LSEs to completely avoid high imbalance prices.[35] TDU Intervenors dispute that LSEs should be required to supply their load's needs with deliverable resources and that such a requirement is antithetical to the Commission's goal of broad regional markets.[36] Further, they state that demand response is insufficient to protect consumers from uncompetitive prices under shortage conditions.[37] TDU Intervenors conclude that the Commission must ensure that sellers of needed imbalance energy have either eliminated or mitigated their market power or are subject to cost-based rates in supplying imbalance energy.[38]

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[32] *Id.* at n.23 and n.25.

[33] *Id.* at 29.

[34] *Id.* at 10-11

[35] *Id.* at 12-16.

[36] *Id.* at 12 (objecting to language providing that LSEs located behind transmission constraints can avoid high locational imbalance prices (LIPs) by securing self-dispatched resources located in their area).

[37] *Id.* at 42, citing FERC, Office of Market Oversight and Investigation, *2004 State of the Markets Report*, at 61 (June 2005).

[38] *Id.* at 17-18. TDU Intervenors also repeatedly assert that, because of day-ahead resource planning and the requirement that LSEs schedule or offer sufficient resources to meet their needs in the day-ahead timeframe, the imbalance market will serve solely to meet real-time imbalances. This repeated assertion shows a basic misunderstanding by TDU Intervenors of SPP's proposed imbalance market. A LSE could have its entire needs met through the imbalance market if it chose to offer its resources in the day-ahead

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15. TDU Intervenors state that the Commission erred in not requiring SPP to net out other sources of fixed cost recovery from the offer cap. TDU Intervenors state that such netting is needed because otherwise sellers will earn more than the full fixed and variable annual costs of a new combustion turbine. TDU Intervenors dispute the Commission's determination that there are material differences between SPP's offer cap and Midwest ISO's narrowly constrained cost adder that would obviate the need for an offset for other sources of fixed cost recovery.[39]

16. TDU Intervenors state that the Commission erred in not requiring SPP to justify the five percent generator-to-load distribution factor for application to every resource. In support of this request, TDU Intervenors argue that generator-to-load distribution factor analysis is highly dependent on assumptions and it may not be appropriate to apply the same generator-to-load distribution factor across the board.[40]

2. <u>Commission Determination</u>

17. The Commission will deny requests for rehearing on SPP's mitigation plan. In evaluating SPP's proposal for mitigating market power in the presence of well-defined structural barriers to competition, the Commission's obligation is to assure that rates are just and reasonable for buyers and sellers. The mitigation measures, as well as the monitoring plan, are key to enhancing the competitive structure of the market and assuring that prices are properly reflective of supply and demand conditions in the short-term and long-term. The Commission must find the appropriate balance between over-mitigation and under-mitigation in mitigating offers into the imbalance market. While under-mitigation may result in some exercise of market power that is not mitigated, over-mitigation means more frequent intervention in the market, and some competitive market results will be mitigated. We find that SPP's mitigation measures, as supported by the monitoring plan, strike an appropriate balance that will result in just and reasonable rates and enable reliable provision of imbalance service.

18. As proposed, mitigation in SPP will tighten as the hours of constraint in a particular location increase. Offer caps will be higher in areas where all suppliers can

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timeframe (instead of self-dispatching those resources) and energy was available to serve its needs in the imbalance market at a lower price.

[39] *Id.* at 47-49.

[40] *Id.* at 49-50, citing SPP's June 5 Filing.

compete to meet imbalance needs during most of the year.[41] Offer caps will be lower in areas where transmission congestion frequently limits the supply available to meet the demand in the area. A supplier's resources that negatively impact the constraint (as measured by the five percent generator-to-load distribution threshold) will be subject to the offer cap, as will all of that supplier's resources located on the importing side of the same constraint. All resources will also be subject to a transitional offer cap of $400/MWh in the first three months of operation and, as discussed below, a $1000/MWh offer cap thereafter. We accept these important elements of the mitigation plan that protect customers by addressing well-defined structural barriers to competition, market concentration issues, a current lack of demand response in SPP and potential market transition difficulties.

19. We note that the monitoring and mitigation proposals of the various RTOs and ISOs need not be identical in order to be judged just and reasonable. In fact, mitigation should be tailored to the unique design of each market taking into account the varying obligations and rights of buyers and sellers and the entirety of the market structure. Here, TDU Intervenors and Golden Spread argue that the only just and reasonable mitigation for SPP is the mitigation applied by PJM with slight modifications to add an RTO-administered scarcity pricing mechanism. They argue that mitigation that allows offer caps at levels above the marginal costs of the last unit dispatched would result in unjust and unreasonable prices in the imbalance market. These commenters ignore the fact that the Commission has accepted, as just and reasonable, mitigation that does not trigger until a bid is determined to be both $100 or 300 percent above a specific generator's marginal costs and have a similar impact on the market price.[42] Thus, the Commission has accepted mitigation that allows for submission of bids well above a particular resource's marginal costs. Further, we note that due, in part, to our actions herein in adopting a safety-net bid cap, the mitigation provides no guaranteed recovery of the costs of a new peaking unit.

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[41] Absent the safety-net bid cap instituted herein, the mitigation would not have allowed "virtually unlimited" prices as TDU Intervenors assert. In areas in which market power concerns are not expected to be significant on an on-going basis, the offer cap would be approximately $2,300/MWh (depending on the price of gas) during the 32 or fewer hours of the year that a constraint has the potential to cause market power problems.

[42] *See Midwest Independent Transmission System Operator, Inc.*, 108 FERC ¶ 61,163, at P 308, 315 (*TEMT II Order*), *order denying reh'g in relevant part*, 109 FERC ¶ 61,157 (2004); *ISO New England, Inc.*, 100 FERC ¶ 61,287, at P 31, 39 (2002).

20. Importantly, we find that the SPP mitigation is well-suited to SPP's imbalance market structure and the obligations of buyers and sellers in that market. SPP's market structure is significantly different from other RTO market structures. SPP's imbalance market is a simple real-time energy market without: (1) a day-ahead market; (2) market-based resource adequacy mechanisms such as a capacity market; or (3) a multi-part bidding mechanism to ensure recovery of start-up and minimum-load costs.[43] Also, SPP has not proposed various tools for providing revenue to supplement the imbalance market revenues such as reliability must-run (RMR) contracts or scarcity pricing mechanisms that administratively set high energy prices during reserve deficiencies.[44] Buyers in the SPP market have an obligation to ensure their own resource adequacy outside of the market mechanisms.[45] Sellers have no obligation to bid into the imbalance market. Additionally, SPP's market is based on a physical rights model, as opposed to the use of financial transmission rights. These differences support a mitigation plan that differs from those in other RTOs.

21. Further, mitigation based on a theory of new entry is just and reasonable for several reasons. Unlike mitigation in other RTOs, SPP's mitigation does not ensure that all sellers will recover their short-run marginal costs. Rather, the offer caps in SPP are tied to the short-run marginal costs and the long-run fixed cost of an efficient, generic gas turbine. The mitigation is supported by a theory that inefficient resources with costs above those of a new entrant should exit the market and efficient resources should enter to meet demand.[46] We also believe that mitigation based on new entry will encourage

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[43] *See infra* P 43.

[44] *Id.* and n.88.

[45] We note that this includes an obligation to ensure that resources are deliverable to loads and sufficient to meet load requirements at all times, including unforeseen peak load levels. We note that this deliverability requirement is not antithetical to broad energy markets as TDU Intervenors' argue. Rather, in order to maintain a stable energy market, generation resources need to be deliverable to loads.

[46] In this regard, it is difficult to comprehend TDU Intervenors' argument that mitigation based on the cost of entry would fail to attract resources to the market, but tighter mitigation based on a particular generator's marginal costs plus 10 percent would provide prices that would attract new generation. It is not clear how under the TDU Intervenors' argument, more strict regulation of prices in the market would provide more incentive for entry than mitigation based on a theory of recovery of new entry costs. Additionally, we fail to see how tightening mitigation and lowering prices in the

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generator investment in constrained areas thereby lessening the impact of transmission constraints. Additionally, since resources in RTOs that employ mitigation based on short-run marginal costs receive other market revenues due to the different market structures described above, it is inappropriate to compare the expected outcomes of marginal cost-based mitigation with SPP's offer caps. We find that the proposed offer caps are appropriate due to a lack of other market revenues for resources and because, together with the safety-net bid cap, they protect against the exercise of market power while letting suppliers offer their resources competitively under a range of market conditions without concerns about their bids being mitigated.

22. While we agree with commenters that it is impossible to completely avoid imbalance charges, we find that SPP's mitigation provides for just and reasonable energy prices during times when imbalances occur and the market is presumed uncompetitive. Moreover, LSEs can limit their market exposure by: (1) ensuring deliverable resources; (2) offering their resources, including energy in excess of their expected load into the market, in addition to submitting schedules; and (3) contracting in advance of a reserve event for emergency energy. Also, we find comparisons to the cost-based formula imbalance service rates contained in the *pro forma* OATT unpersuasive. We reiterate that in moving to a market mechanism for providing imbalance energy, the Commission must assure that rates are just and reasonable for sellers and buyers. In the market, when transmission is unconstrained, buyers will have access to resources across the SPP footprint. We expect these competitive forces to provide benefits to buyers as compared with the rates that buyers now pay for imbalance service outside the deadband.

23. Also, we are not persuaded that the contract concerns raised by Golden Spread arise due to the implementation of the imbalance market. If Golden Spread has no control over the scheduling of its generation, presumably Golden Spread is regularly subject to imbalance charges of $100/MWh or higher under Southwest Public Service's OATT. However, we note that Golden Spread could reap benefits from the market as compared with its current imbalance charges since market prices during competitive periods would not automatically be set at a minimum of $100/MWh and during times of transmission constraints the offer caps could be below $100/MWh.[47]

24. We will not require the netting out of market revenues from the offer caps because this would be contrary to the theory of new entry upon which SPP's mitigation is based and increase the potential for over-mitigation. Midwest ISO nets out the market revenues

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imbalance market would provide the necessary incentives to both parties to enter into the long-term contracts that TDU Intervenors argue are required to support new entry.

[47] *See infra* discussion in section II.B. (Market-Based Rates).

in its offer cap formula applied in tightly constrained areas. However, Midwest ISO's mitigation allows for recovery of each particular resource's short-run marginal costs plus an additional amount determined by the generic fixed costs of a gas turbine. On the other hand, the offer cap mitigation in SPP does not provide assurance of recovery of each particular resource's short-run marginal costs. To do so would be contrary to the theory upon which the mitigation is based that inefficient resources should exit the market and be replaced by new resources. To net out the market revenues that a generic gas turbine might receive in the market would also be contrary to the cost of new entry upon which SPP's mitigation is based and upset the balance between over and under-mitigating.

25. Finally, with regard to the SPP's proposal to apply an offer cap to resources that have a generator-to-load distribution factor of five percent, we stand by our previous finding on this issue.[48] In the *SPP Market Order*, we found the generator-to-load distribution threshold to be appropriate because SPP proposed to apply a more stringent standard than Midwest ISO, and a generator's generator-to-load distribution factor is determined by the market model and will reflect the configuration of the SPP grid. We also noted that the Market Monitor will monitor generators with a smaller impact and is obligated to report problems that arise in the imbalance market that are not addressed by the offer cap mitigation.

B. <u>Market-Based Rates</u>

26. In the *SPP Market Order,* the Commission accepted SPP's proposal that all market participants will be granted market-based rates for sales of imbalance energy into SPP's imbalance market. SPP argued that its mitigation and monitoring plans mitigate market power in the imbalance market of entities within its footprint that have been denied market-based rates. SPP also described significant implementation burdens relating to the melding of cost-based bids and the imbalance market pricing mechanisms that could cause market implementation delays.[49] The Commission found that SPP's proposed mitigation and monitoring plans were adequate to ensure just and reasonable rates in the imbalance market.[50]

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[48] *SPP Market Order*, 114 FERC ¶ 61,289 at P 169.

[49] *See SPP Market Order*, 114 FERC ¶ 61,289 at P 193.

[50] *SPP Market Order*, 114 FERC ¶ 61,289 at P 202-03.

1. **Rehearing Request**

27. Golden Spread argues that SPP's market monitoring and mitigation plan is insufficient to support a grant of market-based rate authority for all sellers into the imbalance market. Southwest Industrials state that the Commission failed to: (1) follow its precedent to only allow market-based rates in RTOs with central unit commitment and dispatch; (2) substantiate a finding of competitiveness in the SPP region;[51] and (3) to proclaim transparent standards to measure the competitiveness of the SPP region and to state how the imbalance market meets those standards.[52] Golden Spread, Southwest Industrials, and TDU Intervenors state that, since no entity has provided the necessary empirical proof that existing competition or demand response will produce just and reasonable rates in the imbalance market, the Commission may not grant market-based rates for entities in the imbalance market.[53] Golden Spread and Southwest Industrials argue that, since entities within the SPP footprint have been denied market-based rates due to the failure to satisfy the Commission's indicative market power screens, the Commission cannot find that a competitive market exists prior to granting market-based rates.[54] TDU Intervenors also assert that the Commission failed to document that during times of transmission constraint, the SPP imbalance market is workably competitive.[55] Moreover, TDU Intervenors add that SPP presented no facts regarding market conditions

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[51] Golden Spread at 7; Southwest Industrials at 6.

[52] Southwest Industrials at 9-10.

[53] Golden Spread at 8; Southwest Industrials at 9; TDU Intervenors at 34 -36, 43. They state that courts have required empirical proof that a competitive market exists before granting market-based rate authority to achieve just and reasonable rates, citing *Farmers Union Cent. Exch., Inc. v. FERC*, 734 F.2d 1486, 1510 (D.C. Cir. 1984).

[54] Golden Spread at 8; Southwest Industrials at 10.

[55] TDU Intervenors distinguished this proceeding from *Edison Mission Energy, Inc. v. FERC*, 394 F.3d 964 (D.C. Cir. 2005), where the court concluded that, in light of the Commission's finding that the New York ISO market was workably competitive, the Commission failed to document that competitive forces were insufficient to render the mitigation reasonable. TDU Intervenors at 39.

during critical times when transmission constraints bind nor provided an analysis of the risks of coordinated and unilateral market power exercise within those transmission-constrained areas.[56]

28. TDU Intervenors state that the Commission erred in departing from precedent that requires case-specific analysis of RTO mitigation once an application for market-based rates is pending.[57] They assert that, because SPP's imbalance market proposal did not involve a specific request for market-based rate authority, the Commission should not have ruled on the adequacy of SPP's mitigation measures.[58] Further, TDU Intervenors state that SPP will not use economic dispatch because it will not operate a day-ahead market and will not require that all resources in the SPP footprint offer into the real-time imbalance market. TDU Intervenors assert that the Commission erred in granting market-based rates for all sellers of the imbalance product by failing to follow Commission precedent that RTO-wide market-based rates are appropriate only if the RTO has economic dispatch.[59]

29. TDU Intervenors assert that imbalance prices will be set significantly in excess of short-run marginal costs and thus they assert that they have shown on a factual and theoretical basis that the mitigation measures are inadequate to prevent the exercise of market power.[60] TDU Intervenors provide an illustrative example of imbalance prices and offer caps that, given TDU Intervenor's many assumptions, show that SPP's mitigation could cause an increase above short-run marginal costs of 140 to nearly 3000

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[56] *Id.* at 34, 36.

[57] TDU Intervenors at 30, citing *AEP Power Marketing, Inc.*, 108 FERC ¶ 61,026 (2004); *AEP Power Marketing, Inc.*, 109 FERC ¶ 61,276 (2004), *reh'g denied*, 112 FERC ¶ 61,302 (2005).

[58] *Id.* at 31.

[59] *Id.* at 44-47.

[60] *Id.* at 38.

percent.[61] TDU Intervenors add that the offer cap will produce unjust and unreasonable rates because it will allow sellers to over-recover their fixed costs given that sellers will receive revenues from sources other than the imbalance market.[62]

2. Commission Determination

30. The Commission will deny rehearing on the issue of market-based rates. As stated in the *SPP Market Order*, we acted upon SPP's market-based rate request to provide certainty about its implementation of its proposed imbalance market rules and bidding requirements.[63] We make two findings to support the grant of market-based rates for the imbalance market product. First, we find that the SPP imbalance market is competitive in the absence of transmission constraints. Second, we reiterate our finding in the *SPP Market Order*, 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.[64]

31. With regard to the relevant market for evaluating market power in the provision of the SPP imbalance product, we find that, when transmission constraints are not binding, SPP's market footprint is the relevant geographic market. Specifically, we find that customers in any control area within SPP have access to the imbalance product from any other control area participating in SPP's imbalance market on similar terms and

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[61] *Id.* at 40-41. We find one of TDU Intervenors' assumptions flawed. TDU Intervenors add the minimum offer cap of $100/MWh (plus the variable costs of a new combustion turbine) back into the equation to calculate the lower end (140 percent) of the supposed increase over short-run marginal costs allowable under SPP's mitigation plan. In the *SPP Market Order*, the Commission directed SPP to remove the $100/MWh minimum from its mitigation plan. Thus, 10 percent is the correct number for the lower end of the range referenced by TDU Intervenors. *See SPP Market Order*, 114 FERC ¶ 61,289 at P 190.

[62] TDU Intervenors at 43.

[63] *SPP Market Order*, 114 FERC ¶ 61,289 at P 202.

[64] *See Id*.

conditions.[65] SPP has a single transmission rate, a common OASIS platform for scheduling transmission, as well as a common formula rate for determining imbalance charges. When transmission constraints in SPP are not binding, the prices within the SPP marketplace will be correlated, *i.e.*, the imbalance price will be identical in all of the control areas participating in SPP's imbalance market due to LMP pricing.[66] Due to these factors, we find that the SPP imbalance market footprint is the relevant geographic market for the imbalance product.

32. With regard to precedent on defining relevant geographic markets in RTOs, we note that TDU Intervenors have misinterpreted the *SPP Market Order* as approving RTO-wide market-based rates for SPP. In the *SPP Market Order*, we found that SPP's mitigation and monitoring plans were sufficient to ensure just and reasonable rates for the imbalance product,[67] but we did not make a finding with regard to market-based rates for any other product. We have stated that "an ISO/RTO with multiple control areas that do not follow a single central unit commitment and dispatch protocol cannot be considered a single market."[68] However, we note that these considerations apply to market-based rates for sales of all electricity products generally and were not intended to apply to products such as imbalance service sold through SPP's imbalance market. Since single central unit commitment is not associated with SPP's imbalance product, this condition is inapposite in defining the relevant geographic market for the SPP imbalance market.

33. The finding regarding competition in the SPP market rests on standard methodologies to determine whether markets are workably competitive. Therefore, contrary to Golden Spread's, Southwest Industrials', and TDU Intervenors' assertions, there is substantial evidence to support that competition will ensure just and reasonable prices in the imbalance market in the absence of transmission constraints. SPP's external market monitor states that, in the absence of transmission constraints, the imbalance

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[65] For example, customers without pre-arranged transmission service to access imbalance energy may buy the necessary transmission service through SPP's schedule 4 at the non-firm point-to-point transmission rate at the time of purchasing the imbalance energy.

[66] Additionally, there will be a marked improvement in the transparency of imbalance prices for the region and for each node on the system due to the LMP pricing.

[67] *SPP Market Order*, 114 FERC ¶ 61,289 at P 202-03.

[68] *AEP Power Marketing, Inc.*, 108 FERC ¶ 61,026, at P 181 (2004).

market is workably competitive.[69] This statement is based on Herfindahl-Hirschman Index (HHI) for the SPP marketplace of 705 and a Pivotal Supplier Analysis showing that there is no single market participant who is necessary to satisfy the peak load.[70] The highest market shares in the SPP marketplace are well below 20 percent.[71]

34. On the other hand, when transmission constraints do bind and the imbalance market may not be competitive in certain constrained areas,[72] SPP's mitigation measures will ensure just and reasonable imbalance market prices and address the exercise of market power during transmission constraints. With respect to market concentration concerns that arise as a result of transmission constraints, the Commission has directed SPP to modify its tariff to provide for offer-capping of resources, owned by the same supplier and impacting the import side of the same constraint, when the supplier has one or more offer-capped resources impacting the particular constraint.[73]

35. Additionally, we find that TDU Intervenors have not shown on a factual basis that SPP's mitigation measures are inadequate to prevent the exercise of market power. TDU Intervenors' illustrative example of increases over short-run marginal cost is rebuttable by a simple examination of differing assumptions. For example, if the short-run marginal cost of the marginal unit is $86/MWh rather than the $72/MWh that TDU Intervenors'

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[69] June 15 Filing, Attachment VI at 42.

[70] *See Id.*, Attachment VI at 42-46 and *2004 State of the Markets Report* at 64-65. We note that the HHI analysis appropriately did not include imports into SPP since the imbalance market will not allow external generators to bid into the market until several months after the market is implemented.

[71] American Electric Power has the highest market share with 15 percent. Oklahoma Gas and Electric and Westar each have a market share of almost 10 percent. *Id.*

[72] *See 2004 State of the Markets Report* at 42-50 (detailing hours of curtailment of firm and non-firm transmission service and frequently constrained flowgates).

[73] *See SPP Market Order*, 114 FERC ¶ 61,289 at P 170; *Southwest Power Pool, Inc.*, 116 FERC ¶ 61,053, at P 93 (2006) (*SPP Compliance Order*).

assume,[74] and the constraint affecting that resource binds seventy percent of the year, it could be shown that SPP's $83/MWh offer cap mitigation will cause prices to be below short-run marginal costs.[75] This example demonstrates the fallacies in TDU Intervenors' assertions that imbalance prices will be set significantly in excess of short-run marginal costs and that sellers will over-recover their fixed costs. Moreover, the safety-net bid cap, instituted in this order, will limit customer exposure to bids above $1000/MWh.

36. More importantly, TDU Intervenors have not shown on a theoretical basis that SPP's mitigation measures are inadequate to prevent the exercise of market power. Since SPP has chosen to base its mitigation on the costs of entry, there is no direct connection between any particular marginal unit's short-term marginal costs and SPP's offer caps. The marginal costs included in SPP's offer caps are based on the generic costs of a new, efficient gas-fired resource and not on the actual marginal costs of the last unit dispatched in the imbalance market. Thus, SPP's mitigation measures are adequate to prevent the exercise of market power and TDU Intervenors have not demonstrated otherwise.

C. Transitional Bid Caps and Safety-Net Bid Cap

37. The Commission instituted transitional safeguards on bids into the SPP imbalance market for a period of six months following the start of the market. As a protective measure against any risks involved in early operation of the imbalance market, the Commission directed SPP to: (1) apply a cap on all bids into the market of $400/MWh

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[74] $72/MWh is the marginal costs of a new gas-fired combustion turbine with a 10,000 btu/kwh heat rate and a $2/MWh variable O&M costs. $86/MWh represents the marginal costs of an older gas-fired resource with a less efficient 12,000 btu/kwh heat rate and a $2/MWh variable O&M cost. Higher short-run marginal costs are possible for older resources or resources involving less efficient technologies.

[75] Using the assumption adopted by TDU Intervenors that a new gas-fired combustion turbine has a marginal cost of $72/MWh, the offer cap for a resource that impacts a constraint that binds seventy percent of the year would be $83/MWh (annual fixed costs of $68,640 divided by 6,132 hours plus $72/MWh). We note that the Commission would be unlikely to find such an offer cap confiscatory given that owners of resources can choose whether to offer into the SPP imbalance market.

for the first three months; (2) require an upper limit on all bids into the market of $1000/MWh during the next four to six months; and (3) designate a sunset date for the expiration of the transitional two-tier bid caps.[76]

38. In addition, the Commission did not require SPP to adopt a safety-net bid cap to all bids in the imbalance market. The Commission found that the safety-net bid cap was unnecessary because SPP has a surplus of generation relative to load in excess of 40 percent during the Summer peak months and SPP requires LSEs to commit sufficient deliverable resources to their loads. Moreover, none of the affected RTOs raised any seams issues in this regard.[77]

1. <u>Rehearing request</u>

39. TDU Intervenors state that the Commission erred in rejecting their request for a safety-net bid cap of $1000/MWh in their protest. They state that the decision on the need for a safety-net bid cap should be based on the ability of consumers to protect themselves via demand response from price spikes due to scarcity rather than on the general adequacy of resources available to serve load. During times of true shortage, where all generation is needed and consumers do not have a mechanism to reduce consumption, TDU Intervenors assert that market power is completely unrestrained without a safety-net bid cap. They also claim that there is no evidence that consumers in SPP can protect themselves through demand response or indicate their willingness to pay for power in times of shortage. Further, TDU Intervenors state that the existence of a safety-net bid cap in all other RTO markets creates seams issues that may harm consumers in neighboring RTOs by exacerbating shortages, as well as cause harm to consumers in SPP from unconstrained prices.[78]

40. Southwest Industrials assert that the Commission failed to provide a reasoned explanation for the transitional offer cap levels or the short period for which these offer caps will apply.[79] They argue that the caps are far in excess of what is required to

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[76] *SPP Market Order*, 114 FERC ¶ 61,289 at P 25-26.

[77] *Id.* at P 173.

[78] TDU Intervenors at 51-53.

[79] Southwest Industrials at 11.

adequately protect customers and the decision to sunset the offer cap is inconsistent with the generic $1000/MWh offer caps that have been in place for years in ISO New England, New York ISO, PJM and Midwest ISO.[80]

2. Commission Determination

41. The decision of whether to institute a longer-term safety-net bid cap in the SPP imbalance market is a difficult one. We have stated that safety-net bid caps ultimately should not be part of a well-designed market.[81] However, the Commission's precedent in the organized markets in New England, New York, PJM and the Midwest supports the institution of a proxy price for demand response where the level of demand response in the market is insufficient to counter supply market power in true scarcity situations.[82] The Commission's recently-issued report on demand response indicates that demand response in the Midwest Reliability Organization region is far better developed than the demand response in the SPP footprint.[83] Additionally, the Commission has previously dealt with seams between RTOs by instituting the same bid cap in neighboring markets to reduce incentives for power to flow out of one market and into another.[84]

42. However, as discussed above, the SPP market situation varies from the situation in other markets in the Eastern Interconnection in which the Commission has imposed a $1000/MWh safety-net bid cap. Unlike these other markets, seller participation in SPP's market will be voluntary rather than tied to a capacity payment or load obligation as it is in other markets in the Eastern Interconnection. If LSEs fail to meet their energy obligations through scheduling or offering into the imbalance market sufficient deliverable resources during times of true scarcity, there will not necessarily be backstop

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[80] *Id.* at 11-12.

[81] TEMT II Order, 108 FERC ¶ 61,163 at P 381.

[82] *See, e.g.*, *Id*. at P 380-381.

[83] *See* FERC, *Assessment on Demand Response and Advanced Metering*, Docket No. AD06-2-000 (2006), at viii-ix (Demand Response Report) *available at* http://www.ferc.gov/legal/staff-reports/demand-response.pdf .

[84] *See generally Midwest Independent Transmission System Operation, Inc.*, 105 FERC ¶ 61,145, at P 76 (2003) (stating that the Commission chose $1000 caps in New York ISO and ISO New England because it had previously authorized the cap for PJM, and did not want to create a seams issue by authorizing a different value without a compelling reason).

power in SPP's imbalance market to meet this load. Because peaking resources cannot recover their start-up and stand-by costs from the SPP imbalance market if their bids are not selected in the market and a $1000/MWh bid cap may not allow for sufficient recovery of costs for peaking resources that run infrequently, it is likely that such peaking resources without long-term contracts or load-serving obligations will not be available in true scarcity situations.[85]

43. Furthermore, the seams issues in SPP are more complicated than those present in Midwest ISO, in which the only market-to-market seam was between Midwest ISO and PJM.[86] SPP borders two organized markets: Midwest ISO and the market operated by the Electric Reliability Council of Texas (ERCOT).[87] Thus, the Commission must examine the $1000/MWh bid cap in Midwest ISO and to some extent the bid cap in ERCOT when deciding the level of any safety-net bid cap for SPP.[88]

44. Although the *SPP Market Order* noted that the SPP area currently has excess generating capability on the order of 40 percent, the Commission recognizes that not all of this power can reach all of the loads within SPP during periods of constraint. Thus,

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[85] Other Eastern organized markets provide for recovery of these stand-by and start-up costs separately from payments made through their energy markets and provide for capacity payments to generators that are obligated to bid into the market. These payments provide some relief to peaking generators. In addition, some organized markets in the Eastern Interconnection also provide RMR contracts to infrequently-operated peaking resources to ensure reliable operation and prevent load shedding. These RMR contracts provide the revenues lacking from the insufficient prices in real-time energy markets for generators that are not able to secure long-term contracts with LSEs.

[86] TEMT II Order at P 380 (accepting Midwest ISO's proposal to adopt a $1000/MWh safety net bid cap prior to implementation by Midwest ISO of a comprehensive and permanent resource adequacy plan).

[87] SPP is electrically separated from ERCOT by DC ties that allow limited amounts of power to flow between the two areas.

[88] ERCOT's current $1000/MWh bid cap will be replaced by a $1,500/MWh bid cap in March 2007, followed by a $2,250/MWh bid cap in March 2008 and a $3000/MWh bid cap two months after ERCOT implements a nodal market. *See Rulemaking on Wholesale Electric Market Power and Resource Adequacy in the Ercot Power Region*, Project No. 31972 (August 10, 2006), *available at* http://www.puc.state.tx.us/rules/rulemake/31972/31972.cfm.

the level of excess generation in SPP may be insufficient to justify not imposing a safety-net bid cap. On balance, we grant intervenors' requests for rehearing and hereby institute a safety-net bid cap of $1000/MWh in SPP after the first three months. Given the Commission's precedent of requiring a safety-net bid cap as a proxy for demand response in scarcity situations in markets where there is insufficient demand response and the seams issues raised by the existence of a $1000/MWh bid cap in all organized markets in the Eastern Interconnection, the Commission finds that a safety-net bid cap is warranted in the SPP market. However, we remain concerned that the prolonged use of the safety-net bid cap may cause harm to the reliable operation of the market in the long-term. Further, we believe that sufficient demand response in a well-designed market warrants removal of, or in some situations raising of, the safety-net bid cap. Therefore, we direct SPP to modify its tariff, no later than 30 days from the date of this order, to institute a $1000/MWh bid cap starting three months after market implementation and continuing until SPP makes a showing that sufficient demand response exists in the market to allow removal of the bid cap or a higher bid cap.

D. Cost-Benefit Study

45. In the *SPP Market Order*, the Commission stated that a cost-benefit study specific to the proposed imbalance market was unnecessary because SPP and its Regional State Committee had previously commissioned Charles River Associates to conduct a cost-benefit study (CRA study) on the merits of implementing an imbalance market.[89] The CRA study found that there will be benefits if an imbalance market is implemented in SPP's region, including economic and reliability benefits, and improved transparency and price signals.[90]

1. Rehearing Request

46. Southwest Industrials argue that the Commissioned erred in relying on an outdated cost-benefit study in accepting SPP's substantially-modified imbalance market proposal. Southwest Industrials state that the cost-benefit study submitted in support of SPP's accepted proposal was the same one used to support the imbalance market proposal that the Commission rejected in the *September 19 Order*.[91] Southwest Industrials further state that, not requiring SPP to update its cost-benefit study is inconsistent with the

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[89] *SPP Market Order*, 114 FERC ¶ 61,289 at P 234 and n.14.

[90] *Id.* at 11-12.

[91] *Id.* at 12.

Commission's precedent that conditioned its approval of the PJM-Midwest ISO joint and common market on the completion of an updated cost-benefit study.[92] Southwest Industrials conclude that in order to meet the just and reasonable standards of the Federal Power Act (FPA), the Commission must: (1) require a new study to consider the latest imbalance market and mitigation rules, current fuel prices and levels of transmission congestion; (2) allow a reasonable opportunity for comment on the new study; and (3) re-evaluate the imbalance market proposal.[93]

2. **Commission Determination**

47. We deny Southwest Industrials' request for rehearing to require SPP to submit a new cost-benefit study. As stated in the *SPP Market Order*, the CRA study sufficiently addressed: (1) the costs and benefits of SPP members continuing to participate in the RTO versus returning to a stand-alone status; and (2) the costs and benefits of an imbalance service market operated by SPP. The CRA study results indicated an overall positive net benefit associated with the imbalance market.[94] Moreover, the CRA study was recently updated to reflect increases in fuel costs and the results indicate a $54 million increase in 2006 benefits from $50.5 million to $104.4 million.[95] Further, contrary to Southwest Industrials' assertion, the Commission did not require Midwest ISO and PJM to update their cost-benefit study. Rather, Midwest ISO and PJM voluntarily committed to updating the cost-benefit study because the 2002 study predated Midwest ISO's and PJM's joint operation under the their Joint Operating Agreement in which they agreed generally to form a joint and common market.[96] The two RTOs needed an updated cost-benefit study to make final decisions as to which joint and common market initiatives to pursue and the timelines to adopt because additional elements of a joint and common market would only be undertaken if the benefits of those changes exceeded the costs of implementing the changes.[97] Therefore, the cost-benefit

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[92] *Id.* at 12 -13, citing *Midwest Independent Transmission System Operator, Inc. and PJM Interconnection, LLC*, 114 FERC ¶ 61,277 (2006).

[93] *Id.* at 13-14.

[94] *SPP Market Order*, 114 FERC ¶ 61,289 at P 234.

[95] *Id.*

[96] *Midwest Independent Transmission System Operator, Inc. and PJM Interconnection, LLC,* 114 FERC ¶ 61,277, at P 26 (2006).

[97] *Id.* at P 25, 28.

study update in Midwest ISO and PJM cannot be the basis for requiring SPP to conduct a further study. Finally, there is no FPA requirement for a cost-benefit study of a change in market structure.

E. Initial Assessment

1. Rehearing Request

48. Golden Spread argues that the Commission failed to address its argument that SPP's external market monitor should be required to submit its final report on remaining compliance and market power issues for the SPP footprint, *i.e.*, the Initial Assessment, prior to the Commission granting approval of the imbalance market. Golden Spread requests that the Commission direct SPP to address the effect of each market power issue and concern identified in the Initial Assessment, and require SPP to demonstrate that its mitigation and monitoring proposal will be sufficient to address each of the issues.[98]

2. Commission Determination

49. The Initial Assessment is defined in the SPP tariff as an assessment that the Market Monitor will conduct prior to the start of the imbalance market for the purpose of identifying opportunities for entities that own both transmission and generation to exercise transmission market power.[99] Additionally, the Initial Assessment is intended to establish parameters for monitoring the identified opportunities for the exercise of transmission market power.[100] Indeed, the external market monitor stated in the original filing that "[t]he Initial Assessment was intended to provide some clarity upfront to [m]arket [p]articipants in SPP on what actions would be monitored by [the] Market Monitor going forward with respect to transmission."[101]

50. Golden Spread's initial objection with regard to the Initial Assessment was that "it is illogical … to first implement a market in the SPP footprint and only later perform an initial assessment to determine what market power issues may exist that would interfere

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[98] Golden Spread at 4.

[99] Attachment AF, section 2.2.

[100] *Id*.

[101] Exhibit III to January 4 Filing, Testimony of Craig R. Roach at 26.

with the proper functioning of that market."[102] We find that the Initial Assessment, a requirement accepted as part of the SPP imbalance market proposal, is simply a poorly-named tool used to identify opportunities for the exercise of transmission market power[103] that exist outside of the imbalance market and to identify for market participants specific issues upon which the Market Monitor will focus in the future in exercising its broad transmission market power monitoring authority. Contrary to Golden Spread's initial assertion, the Initial Assessment was not intended to, and indeed does not focus on the impact that transmission market power will have on the imbalance market.[104] In fact, the imbalance market is cited as one solution to concerns raised regarding the ability of transmission owners to disfavor their competitors through the management of transmission congestion.[105] Therefore, we reject Golden Spread's argument that the Commission could not evaluate the merits of SPP's mitigation plan to address generation market power prior to the Initial Assessment's evaluation of transmission market power issues.

51. Additionally, in the *SPP Market Order*, the Commission accepted SPP's monitoring plan, as modified, to address the exercise of transmission market power.[106] We find that the Commission's grant of broad transmission market power monitoring authority through acceptance of SPP's monitoring plan paired with the requirement that SPP complete the Initial Assessment of transmission market power issues prior to the implementation of this monitoring plan, provides sufficient protection against transmission market power and notice of specific monitoring issues. Thus, we reject Golden Spread's request for rehearing with regard to Commission and SPP evaluation of the Initial Assessment.

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[102] Golden Spread Protest in Docket No. ER06-451-000 at 8 (filed January 25, 2006).

[103] Transmission market power includes the ability of an entity to affect transmission, such as determining available transfer capability, in order to disadvantage its competitors or advantage itself. Generation market power includes economic and physical withholding of generating resources.

[104] *See* Boston Pacific Company, Inc., Initial Assessment of Remaining Compliance and Market Power Issues Related to the Provision of Transmission Service, (March 24, 2006).

[105] *Id.* at 36.

[106] *SPP Market Order*, 114 FERC ¶ 61,289 at P 174.

F. Market Readiness

1. Rehearing Request

52. Southwest Industrials argue that the Commission erred in accepting a piecemeal proposal from SPP rather than rejecting the filing in full. Southwest Industrials state that the Commission should have required that SPP file its proposal in its entirety as the Commission required of Midwest ISO.[107] Southwest Industrials conclude that SPP must submit a fully-formed proposal before the Commission can determine whether the proposal is just and reasonable.[108]

53. Golden Spread argues that the Commission failed to address its argument that infrastructure deficiencies in SPP, especially in the Southwestern Public Service control area, preclude the implementation of a market that employs LMP. In particular, Golden Spread asserts that the Southwestern Public Service control area has a lack of connectivity to the rest of SPP that could result in imbalance market prices that are dependent upon bids from resources in the Southwestern Public Service control area of which 89 percent are owned by Southwestern Public Service itself.[109]

2. Commission Determination

54. In the *SPP Market Order*, we recognized that SPP's proposal to implement an imbalance market lacked certain elements. However, we also stated that implementation of organized markets is an iterative process that requires modification of tariff provisions over time.[110] As modified pursuant to Commission directives, SPP's proposal will mark a significant improvement in the provision of imbalance service bringing benefits to market participants. Although it is the Commission's preference to deal with fully-formed market designs supported by all market participants, the realities of organized market formation frequently require Commission action prior to submission of what will

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[107] Southwest Industrials at 4-5.

[108] *Id.* at 5-6.

[109] Golden Spread at 3.

[110] *SPP Market Order*, 114 FERC ¶ 61,289 at P 2.

eventually become a final market design.[111] Thus, the Commission acted conservatively in conditionally accepting in part the substantial proposal submitted by SPP. The Commission noted the missing elements of the filing and conditioned its acceptance of SPP's market design on further orders to follow the submission of these missing elements.[112] Furthermore, to address the concerns raised with regard to market readiness, the Commission required SPP to submit additional readiness reports and to operate under a set of transitional safeguards in its first months of market operation that would help assure just and reasonable rates and reliable operations.[113] Therefore, we reject Southwest Industrial's request that we now reject SPP's imbalance market proposal on account of its original missing elements.

55. We reject Golden Spread's contention that LMP is an inappropriate structure to apply to areas with infrastructure deficiencies. In the *September 19 Order*, we stated that LMP in the SPP footprint was appropriate because LMP and uniform pricing leads to the least cost dispatch and the lowest possible prices while fairly compensating suppliers.[114] LMP also provides pricing transparency and transmission congestion valuation for tightly constrained areas. Furthermore, the Commission has accepted LMP as the appropriate pricing mechanism in several RTOs with the kind of insufficient infrastructure

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[111] Contrary to Southwest Industrials' implication, similar to actions taken in the instant proceeding, the Commission accepted and suspended Midwest ISO's less than fully complete market proposal, setting the unresolved treatment of approximately 350 grandfathered agreements for a fact-finding hearing and delaying action on allocation of financial transmission rights. *See Midwest Independent Transmission System Operator, Inc.*, 107 FERC ¶ 61,191 (2004). Further, the Commission accepted Midwest ISO's proposal even though Midwest ISO proposed to address resource adequacy issues in a future filing and failed to clearly address the allocation of NERC functional responsibilities. *See Midwest Independent Transmission System Operator, Inc.*, 108 FERC ¶ 61,163 at P 137, 396, *order on reh'g*, 109 FERC ¶ 61,157 (2004), *order on reh'g*, 111 FERC ¶ 61,043 (2005).

[112] SPP has submitted and the Commission has acted upon all of these missing elements with the exception of a standard form meter agent agreement. *See SPP Compliance Order*, 116 FERC ¶ 61,053.

[113] *SPP Market Order*, 114 FERC ¶ 61,289 at P 18.

[114] *September 19 Order*, 112 FERC ¶ 61,303 at P 23.

deficiencies that Golden Spread describes.[115] In each of these cases, the Commission has accepted mitigation to address market power issues related to the infrastructure deficiencies.

56. Moreover, given the asserted low level of connectivity between the Southwestern Public Service control area and the rest of SPP, we expect a high number of annual hours of constraint on the flowgates connecting Southwestern Public Service with the rest of SPP and a resulting low offer cap that would apply to all of the resources owned or controlled by Southwestern Public Service.[116] As discussed above, if the annual hours of constraint are as high as Golden Spread suggests, bids by Southwestern Public Service would be kept at a level well below the minimum $100/MWh that Golden Spread now incurs for imbalances that exceed the 1.5 percent/2MW imbalance bandwidth. When the constraints between Southwestern Public Service and the rest of SPP are not binding and power can flow into the Southwestern Public Service control area from other resources in SPP, imbalance service prices will be set by competitive forces.

G. <u>Demand Response</u>

57. In the *SPP Market Order*, the Commission did not require SPP to institute a demand response program because RTOs have never been mandated to institute such programs. However, the Commission acknowledged the importance of demand response programs and therefore directed SPP to provide a report to the Commission one year from the date of market implementation on ways it can incorporate demand response into its imbalance market.[117]

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[115] *See generally Midwest Independent Transmission System Operator, Inc.*, 109 FERC ¶ 61,157, at P 212, 232-235 (2004) (denying request to adopt zonal pricing rather than LMP and noting specific mitigation measures for Midwest ISO areas with transmission constraints that bind at least 500 hours per year); *Old Dominion Electric Cooperative v. PJM Interconnection L.L.C. and Conectiv*, 92 FERC ¶61,278, 61,935 (2000) (background section describes the transmission constraints in the Delmarva Peninsula and details the Commission's acceptance of PJM's LMP model); *New England Power Pool and ISO New England, Inc.*, 100 FERC ¶ 61,287, at P 10, 14-18 (accepting LMP and mitigation for chronically constrained areas), *order on reh'g*, 101 FERC ¶ 61,344, at P 2-3 (2002).

[116] *SPP Compliance Order*, 116 FERC ¶ 61,053 at P 93.

[117] *SPP Market Order*, 114 FERC ¶ 61,289 at P 229.

1. **Rehearing Request**

58. Southwest Industrials state that the Commission erred in not requiring demand response as a necessary component of SPP's imbalance market. Southwest Industrials state that there is an "admitted lack of demand elasticity" in the SPP imbalance market and therefore the Commission cannot conclude that a competitive market exists.[118] They state that Commission precedent supports demand response as a necessary element of competitive markets.[119] In that respect, they request the Commission to recognize the integral role that demand response must play from the start of the imbalance market by either finding that the imbalance market is not adequately competitive or requiring SPP to ensure demand response opportunities prior to market implementation.[120]

59. Further, Southwest Industrials state that if SPP's current imbalance proposal is approved by the Commission, it should also provide an opportunity to retail customers to participate and receive compensation that is functionally similar to generators. Therefore, Southwest Industrials request the Commission to direct SPP to work with retail customers in the SPP footprint to ensure that complete rules for allowing curtailable customers to participate in any imbalance market are explicit in the SPP tariff before the imbalance market is implemented.[121]

2. **Commission Determination**

60. As stated in the *SPP Market Order*, the Commission recognizes that demand response programs are an important element of efficient and reliable markets.[122] However, we also note that implementing demand response programs requires careful development that coordinates closely with utilities, state commissions and other interested parties. Moreover, demand response programs have not been treated uniformly across regions by the various RTOs/ISOs.[123] Some of the RTOs have implemented

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[118] Southwest Industrials at 15.

[119] *Id.* at 14, citing *California Independent System Operator*, 105 FERC ¶ 61,140 at P 69 (2003) and *PJM Interconnection, L.L.C.*, 95 FERC ¶ 61,306 (2001).

[120] *Id.* at 15.

[121] *Id.* at 14.

[122] *SPP Market Order*, 114 FERC ¶ 61,289 at P 229.

[123] Demand Response Report at 97.

various pilot programs before instituting demand response resources and others are still proposing various measures to implement a more efficient program.[124] The Commission, however, has never mandated RTOs to implement a demand response program or to develop such a resource prior to market implementation.

61. Additionally, we disagree with Southwest Industrials that no adequate competitive market exists in the SPP footprint. As discussed above in the market-based rates section (in section II.B.), we find that absent transmission constraints, the SPP imbalance market is workably competitive. This allows all excess generation to compete to serve load when constraints are not binding in SPP. Thus, absent transmission constraints, competition in the SPP imbalance market will ensure just and reasonable prices.

62. Given the careful development and coordination involved in demand response implementation, we believe that further consideration is warranted to ensure that an efficient and reliable market is developed in the SPP footprint. SPP shall coordinate with utilities, state commissioners and other interested parties to consider provisions for participation of demand resources in the imbalance market. Furthermore, within six months of the date of this order, SPP shall file either (a) modifications to its tariff to incorporate procedures, for implementation in summer 2007, for the commitment in the day-ahead process and dispatch in the imbalance market of interruptible demand, behind the meter generation and other demand resources that are capable of providing imbalance service, or (b) an explanation and rationale for not including such provisions in its tariff and identify specific barriers, causes or issues that prevented the filing. At that time, the Commission will consider whether it would be useful to convene a technical conference to consider the filing.

H. Monitoring Requirements

1. Commission Determination

63. In the *SPP Market Order*, the Commission declined to require special monitoring of control area operators within SPP, finding that control area operators were already subject to monitoring to the extent they impact SPP's Markets or Services.[125]

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[124] *See, e.g., PJM Interconnection, LLC*, 95 FERC ¶ 61,306 (2001).

[125] *SPP Market Order*, 114 FERC ¶ 61,289 at P 142.

2. Rehearing Request

64. TDU Intervenors argue that the Commission erred in not requiring specific provisions in SPP's monitoring plan for monitoring of control area operator conduct. TDU Intervenors state that, because SPP will maintain multiple control areas and balancing authority functions at the control area level just like the Midwest ISO, the Commission should require the same separate monitoring of control area operator activities as it required for Midwest ISO.[126] TDU Intervenors add that the opportunity for anti-competitive conduct by control area operators will be the same as the opportunities in Midwest ISO that the Commission sought to address by directing development of control area operator monitoring provisions.

3. Commission Determination

65. The Commission required specific control area operator monitoring in Midwest ISO to generally address manipulation of the market by a control area operator and specifically to protect against "unnecessary withholding of capacity" from Midwest ISO's markets.[127] Additionally, the Commission expressed concern that the Midwest ISO control areas retained functions including coordinating operating reserves and regulation, load forecasting and relieving certain transmission constraints.[128] We find that the SPP imbalance market and the SPP monitoring plan differ significantly from Midwest ISO's market and monitoring plan such that the requirement for a specific control area operator monitoring provisions are unnecessary in SPP. Many of the protections in Midwest ISO's monitoring plan would be irrelevant to SPP's proposed market. For example, SPP, unlike Midwest ISO, has no requirement that suppliers must offer their energy into the imbalance market and no mitigation provisions for withholding of energy. Thus, it would be inconsistent for SPP to monitor control area operators for withholding of capacity as Midwest ISO monitors.

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[126] TDU Intervenors at 54-55, citing *Midwest Independent Transmission System Operator, Inc.*, 108 FERC ¶ 61,163, at P 256 (2004) and *Midwest Independent Transmission System Operator, Inc.*, 109 FERC ¶ 61,285, at P 140 (2004).

[127] *Midwest Independent Transmission System Operator, Inc.*, 108 FERC ¶ 61,163 at P 256.

[128] *Midwest Independent Transmission System Operator, Inc.*, 109 FERC ¶ 61,285 at P 140.

66. Furthermore, any manipulation of the SPP market by control area operators within SPP is prohibited by the Commission's new regulations that were not in effect at the time of Midwest ISO's market development.[129] Additionally, SPP monitors for abuses of horizontal and vertical market power in SPP's Markets and Services. These Markets and Services include the provision of operating reserve and regulation services, and will include new services provided through the imbalance market such as review of load forecasts and resource plans. Also, SPP will specifically monitor the provisions of energy after a reserve activation event and will monitor for uneconomic overproduction and strategic withholding.[130] Since SPP will monitor control area operators for market power abuses that impact SPP Markets and Services and the monitored elements are similar, if not identical, to the monitoring we required of control areas in the differently-structured Midwest ISO market, we find that SPP's monitoring plan is sufficient and there is no need to develop a monitoring plan specifically for control area operators.

I. <u>Other Issues</u>

1. <u>Rehearing Request</u>

67. TDU Intervenors state that the Commission should clarify that system power purchases are eligible for inclusion in a market participants' resource plans and that LSEs can continue to use system purchases to satisfy their resource plan obligation.[131] TDU Intervenors also request that the Commission expressly require that SPP report on whether the state estimator captures constraints affecting small LSEs in a manner comparable with how it captures constraints affecting other control area loads. TDU Intervenors assert that this information is necessary in order for the Commission and affected parties to tell whether the state estimator works in a discriminatory fashion.[132]

68. Additionally, TDU Intervenors assert that the Commission failed to address several "clean-up" tariff modifications raised by TDU Intervenors in their initial protest. TDU Intervenors state that these clean-up modifications include: (1) revisions to the section references and certain incorrect wording in section 5.3(d) of Attachment AE;

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[129] *See Prohibition of Energy Market Manipulation*, Order No. 670, 71 Fed. Reg. 4,244 (Jan. 26, 2006), FERC Stats. & Regs. ¶ 31,202 (2006).

[130] *See generally SPP Compliance Order*, 116 FERC ¶ 61,053 at P 19, 84-94.

[131] TDU Intervenors at 4-6.

[132] *Id.* at 6-7.

(2) revision to Schedule 4 to correct a reference to "Transmission Provider" that should be a reference to "Transmission Owner"; (3) clarification of section 1.2.2 of Attachment AE to allow a party to change its registration information prior to commencement of market participation; (4) clarification that market participants can change meter settlement locations after initial location selection; and (5) clarification that Schedule 4 charges apply solely to load and not to sellers of imbalance service.[133] Additionally, TDU Intervenors renew their assertion that language in Schedule 4 relating to transmission charges for market participants using point-to-point service "would be made clearer" with the addition of certain phrases.[134]

2. <u>Commission Determination</u>

69. In the *SPP Compliance Order*, the Commission accepted revisions to SPP's tariff that allowed for third-party sales and purchases to be included in the resource plans submitted by market participants.[135] We find that these accepted revisions provide the clarification sought by TDU Intervenors and we dismiss the request for clarification as moot.

70. Also, we agree with TDU Intervenors that information regarding the granularity of state estimator is necessary in order for the Commission and affected parties to discern whether the state estimator works in a discriminatory fashion. Accordingly, we grant the requested clarification and require SPP to include an assessment of its state estimator's capabilities related to the effect of constraints. In the *SPP Market Order*, we directed SPP to submit an informational filing, within one year after the start of market operations, analyzing: (1) the effects of its calibration method; and (2) TDU Intervenor's proposal to become part of a consolidated settlement location with the host control area.[136] We now direct SPP to incorporate into that filing an analysis of whether the state estimator captures constraints affecting LSEs in a manner comparable with the way it captures constraints affecting larger control-area operators.

71. With respect to TDU Intervenors' request for clean-up modifications, we direct SPP to modify Schedule 4, no later than 30 days from the date of this order, to change the last reference to "Transmission Provider" to "Transmission Owner" and modify section

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[133] TDU Intervenors, Attachment A.

[134] *Id.*

[135] *SPP Compliance Order*, 116 FERC ¶ 61, 053 at P 58, 63.

[136] *SPP Market Order*, 114 FERC ¶ 61,289 at P 117.

5.3(d) of Attachment AE to change: (1) the word "greater" to "less;" (2) the references to section 5.4(c) to section 5.3(c); and (3) "Over Scheduling Charge" to "Under Scheduling Charge." We find that the remaining requested modifications are unwarranted or amount to more than simple clean-up requests. Since many of the requests amount to requests to change the meaning of the tariff, TDU Intervenors must meet their burden of showing that the requested clarifications are necessary and without them that the tariff would be unjust and unreasonable. TDU Intervenors have not met this burden. Additionally, we note that with respect to the clarity of Schedule 4, the Commission recently directed SPP to clarify how these charges apply using numeric examples.[137] We will not direct further clarifying changes to Schedule 4 in this order.

<u>The Commission orders</u>:

(A) The requests for rehearing are hereby denied in part and granted in part as discussed in the body of this order.

(B) SPP is hereby directed to make filings as discussed in the body of this order within the timeframes specified in the body of this order.

By the Commission.

(S E A L)

Magalie R. Salas,
Secretary.

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[137] *SPP Compliance Order*, 116 FERC ¶ 61,053 at P 81.