

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Price Formation in Energy and Ancillary)	Docket No. AD14-14-000
Services Markets Operated by Regional)	
Transmission Organizations and)	
Independent System Operators)	

COMMENTS OF SOUTHWEST POWER POOL, INC.

Southwest Power Pool, Inc. ("SPP") submits the following comments in response to the Commission Staff Notice Inviting Post-Technical Workshop Comments issued in this docket on January 16, 2015.

I. COMMENTS

SPP appreciates the opportunity to comment in this proceeding. SPP's responses below touch on issues specific to SPP's operations and are focused on SPP's experience in its region.

Subject No. 1: Offer Caps

In light of changes in fuel acquisition technology, Clean Energy rules, and experience with rapid fluctuations in fuel and fuel delivery costs, SPP believes the current "safety net" offer cap of \$1,000/MWh should be reviewed. Because of recent experience with seasonal fluctuations, a seasonal fixed offer cap might be appropriate. In any event, without a change in the offer cap, the funding of costs greater than the cap would need to be through uplift to the market. Administration of such uplift payments could result in additional market monitoring needs and may need to include sunset clauses on perennially expensive supplies. SPP currently has no cap on bid-in load; market participants can ensure bid clearing in SPP by submitting fixed bids.

Subject No. 2: Transparency

It is appropriate to allow market participants to understand the full cost of the markets and the decisions that drive the costs associated with unit commitment, uplift, and other operator actions. A delicate balance exists, however, between disclosure, confidentiality, and market abuse. Disclosing to market participants pre-real-time and real-time operational constraints provides opportunities, at times, for market participants to take uncompetitive actions. Much of the data provided to a Regional Transmission Organization (“RTO”) or an Independent System Operator (“ISO”) (and to the market monitor) can be used to determine contractual and other business arrangements, thereby opening the RTO/ISO to legal action. Although market mitigation and market monitoring alleviate some of the concern, history has demonstrated the inventiveness of market participants in benefitting from operational constraints including, without limitation, generator outages, parallel flow or loop flow, and local reliability issues.

Logistical concerns also impact information sharing. Many of the uplifts are calculated on a daily and monthly basis, making real-time disclosure of the full costs impracticable. On a monthly basis, “all-in” prices could be calculated and posted. As with the posting of offer data, much of the data regarding operational constraints could be anonymized and posted on a delayed basis. SPP currently makes public all transmission outages entered into SPP’s Control Room Operations Window (“CROW”) system, for example. SPP has reported on the “state of the market” on a monthly basis, for example, and has included in those reports analysis of events that drove pricing.

As discussed in the Commission Staff's August 2014 report,¹ steps are underway to improve such reporting with the incorporation of non-jurisdictional entities. SPP is willing to engage with Commission Staff to learn about their analysis and perhaps be better able to assist such efforts. In many cases, such as over-collected losses and congestion right uplifts, the uplift is either required to be disconnected from pricing or is allocated on a sum-total basis. Either scenario results in uplift that is not directly attributable to actions at a particular location. In those events, SPP can work with Commission Staff and other RTOs/ISOs at arriving in a consistent reporting methodology.

Subject No. 3: Pricing Fast-Start Resources

SPP's quick-start logic allows market participants to submit a physical minimum and maximum instead of a block load approach. This approach has its advantages and disadvantages. SPP allows quick-start resources to include start-up and no-load costs in the energy offer. The Security-Constrained Economic Dispatch ("SCED") allows off-line resources that meet quick-start criteria to set the Locational Marginal Price ("LMP"), and start-up and no-load costs are included in the price. This approach also enables resources to participate in the real-time solution without being block loaded. However, if the SCED dispatches the resources from zero but does not achieve the resource's actual physical minimum on initial dispatch, the resource may choose not to come online or the resource may take a risk in coming online. There is a chance that, in the next interval, the SCED will not dispatch the resource to its physical minimum again. Once the SCED achieves the physical minimum in the dispatch, however, the SCED will respect the minimum in subsequent intervals.

¹ Staff Analysis of Uplift in RTO and ISO Markets, Docket No. AD14-14-000 (Aug. 21, 2014).

Subject No. 4: Settlement Intervals

SPP incorporates a five-minute settlement of the Real-Time Balancing Market (“RTBM”). The purpose of this design element is two-fold: (1) to align the operational instructions and co-optimization of capacity with the settlement, and (2) to incent more ramp capability to be made available. This method of settlement does cost more to implement due to the increased storage and validation needs. It also results in more unattributed uplift because the maximum granularity of uplift is hourly.

SPP's implementation of five-minute intervals used existing metering. If the settlement metering granularity were hourly, the real-time data would be used to allocate values to the five minute settlement periods. There would be increased attention to the real-time meter values due to their use in settlement allocations. Further, the increased granularity might increase the number of re-pricing incidents because missing real-time values are not mitigated in an hourly calculation. The increase in granularity associated with changing from hourly to five-minute settlement would increase by a factor of twelve the number of intervals that would have to clear. That increase in the duration of clearing would render the current window of four to five hours insufficient. This would be an increase in precision that could, in certain circumstances, reduce the accuracy of the commitment and dispatch solution because it is all model based.

Subject No. 5: New Products to Incent Flexibility

SPP includes a rampable headroom parameter in its Reliability Unit Commitment (“RUC”) processes to ensure enough ramp is available from hour to hour. SPP is investigating the possibility of adding a ramping market to address the issue of flexible resources. In the meantime, SPP has implemented regulation performance compensation to pay regulating

resources. Based on benefits projected in preliminary analyses, SPP is planning to implement multi-stage configurations for combined cycle in 2017.

Subject No. 7: Uplift Allocation

Discussion about the philosophy and rules around commitment with market participants is always desirable. To the extent that cost causation is determinable and the process expenses are outweighed by the benefit of using cost causation, uplift should be directly attributed. At SPP, the commitment above and beyond the load forecast plus reserves is performed under the category of “headroom,” and the philosophy and results of this approach are subject to periodic discussion with SPP's stakeholder groups.

Subject No. 8: Market and Modeling Enhancements

SPP is always in dialogue with stakeholders on the subject of enhancements to SPP's Integrated Marketplace. SPP is investigating the merits of modeling lower-voltage transmission to reduce manual unit commitments. Additionally, SPP may change its reserve requirements for circumstances such as extreme weather. With respect to penalty factors, SPP removes their impact and allows the marginal units that were deployed in the solution to set prices. There is a direct relationship between the recalculated shadow price and the relaxation penalty factor for transmission loading relief. When there are concerns with the transient stability, flowgates have been set to meet criteria more stringent than N-1. Finally, SPP believes new products should be evaluated based on the frequency of need, the cost of system development, and the benefits to the market.

Subject No. 9: Shortage Prices

SPP implements shortage pricing in both the Day-Ahead Market and RTBM. The advantage is price consistency between the two markets over time.

Subject No. 11: Interchange Uncertainty

Scheduling uncertainty affects SPP's ability to forecast load requirements, which in turn affects resource commitment patterns. SPP is adjacent to the Electric Reliability Council of Texas (“ERCOT”), non-RTO/ISO participating Balancing Authorities, the Western Interconnection, and the Midcontinent Independent System Operator, Inc. (“MISO”). As a result, it is difficult to predict when market participants will be importing and exporting power. SPP has implemented a ramp reservation system to help manage the volume of interchange across the footprint and is investigating whether implementing a Coordinated Transaction Scheduling (“CTS”) design between MISO and SPP would be beneficial. Data that may benefit market participants in this regard would be load forecast, pre-RTBM pricing, generation stack, ramp information, and scheduled tie information.

II. CONCLUSION

SPP continues to appreciate the opportunities the Commission has afforded for participation throughout this proceeding. SPP hopes the foregoing information will assist the Commission's consideration of these issues.

Respectfully submitted,

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