

November 2, 2020

Via Electronic Mail

Board of Directors and Regional State Committee of the Southwest Power Pool, Inc.
c/o Paul Suskie, Staff Secretary
201 Worthen Drive
Little Rock, Arkansas 72223-4936

Dear Members of the Board and Regional State Committee:

The undersigned organizations write to respectfully request your consideration of our comments on the recently published SPP staff white paper [“Self-Commitments in SPP’s Day-Ahead Market”](#) (September 2020). We look forward to continuing to engage with the Board of Directors, Regional State Committee, Market Monitoring Unit (MMU) and SPP staff on the issue of self-commitments in the region as SPP and its members work to develop market solutions.

Please contact John Moore (jmoore@nrdc.org) and Katie Southworth (katie.southworth@emvenergy.net) if you have any questions and would like to discuss the PIO comments attached to this letter.

Sincerely,

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Enclosure (1)

Comments of Public Interest Organizations (PIOs) on Southwest Power Pool's (SPP) Staff White Paper on Self-Commitments in the Day-Ahead Market

1. The white paper inappropriately downplays the impact of uneconomic self-commitment in SPP.

SPP's analysis concludes that "on average, only 10% of self-committed generation would not have been chosen for commitment [by SPP] and dispatched on a least cost basis," a statement that suggests the practice of uneconomic self-commitment should not be viewed as problematic. Yet the study's results run deeply counter to this assurance, showing that the practice of uneconomic self-commitment resulted in a systematic market-wide price suppression of 8 percent over the six indicative weeks, and as high as 14 percent during low market price conditions.

SPP's conclusion that "85-95% of self-committed generation was committed and dispatched economically" is a misrepresentation of the scale of the problem. The problem is that 5-15 percent of self-committed generation, as a rule representing marginal generators, elected to operate out of merit. Those generators all acted to push the supply curve to the right by an equivalent number of megawatts, and in doing so incurred both costs for their captive ratepayers and suppressed market prices for competitive generators. The conclusion that should be drawn by SPP on the basis of the analysis is not that the majority of the time coal generators successfully commit to operate during revenue neutral or revenue positive hours, but instead that the number of generators acting out of merit have a substantial impact on market prices.

SPP's paper confirms the findings theorized by analysts without access to the same level of granular or proprietary data available to SPP staff (*See generally* Sierra Club, "[Playing with Other People's Money: How Non-economic Coal Plants Distort Energy Markets](#)" (October 2019) and Union of Concerned Scientists, "[Used but How Useful](#)" (May 2020)). SPP first shows that the process of uneconomic self-commitment has distortionary and inequitable market price impacts. In addition, SPP's assessment of six scenarios, or test periods, shows that the market price distortion rises as a function of falling market prices - in other words, when market prices fall, the price suppressive impacts of uneconomic self-commitment grow quickly.

The later finding, that price suppressive impacts grow as prevailing market prices fall, should be a glaring red flag to SPP staff, because it strongly suggests that there are market participants whose commitment processes are divorced from market price signals. A relatively low-cost generator that blindly self-commits when prevailing market prices are high is likely to luck out into high market prices, showing no error. However, when that same generator blindly self-commits when prevailing market prices are low, it forgoes market revenue and suppresses market prices by operating out of merit. SPP's findings clearly show that the level of self-commitment, and the degree to which that self-commitment drives poor outcomes, is directly correlated with falling market prices, suggesting that the problem is endemic and widespread.

Finally, SPP's analysis implies an excess energy cost of more than \$60 million incurred in the first three quarters of 2020 alone - a not insubstantial impact. The results of this analysis are not a call for incremental change, but a call for a clear-eyed view of a systemic market problem.

The SPP MMU and many of SPP's own members have reached the conclusion that self-commitment is a significant issue in SPP. SPP staff should work with the public to develop solutions, and provide opportunities for PIOs and others to provide feedback on their efforts moving forward, rather than conducting studies and presenting their results behind closed doors.

2. The SPP analysis was conducted without formal public input.

SPP staff conducted the study and presented their results to the Board of Directors and Regional State Committee in closed door meetings, without seeking public input or presenting the results in a publicly available forum. PIOs request that SPP staff provide additional information on the study and the inputs and assumptions used in the analysis. Core questions are unanswered by the white paper's narrowly scoped two-page summary. For example:

- It is unclear if SPP assumed that the marginal cost of generation reflected generator offers to SPP or the assessment of incurred production costs. In PIOs experience through litigated cases, offer curves to SPP often reflect bidding strategies or an intended outcome that may differ substantially from incurred production costs.
- It is unclear what kind of cycling costs were assumed by SPP. PIOs are aware that a generator's assessment of start costs are highly correlated with that generator's expectations of its cycling limitations, either physical or notional.

3. SPP's analysis does not accurately reflect the impact of uneconomic self-commitments.

SPP staff analyzed the impact of self-committed resources across six study weeks between August 2019 and May 2020. However, the selection of weeks appears to be biased towards higher market price weeks, where price suppressive impacts are attenuated. While the average marginal energy cost in the study weeks was \$21.4/MWh, the median of weekly average locational marginal prices (LMPs) in SPP from January 2019 to today is substantially less at \$19.5/MWh; in addition, average weekly market prices in 2020 have been \$16.7/MWh in the first three quarters of 2020. Two of SPP's selected weeks were below the median, but three were far above the median (81st to 97th percentile), and only one was close to the median LMP. This is important because SPP's findings also confirm that price suppressive impacts of non-economic commitment are more pronounced in lower market price environments (see Table 1 in the white paper).

Overall, there were 31 weeks between January 2019 and today where weekly average LMPs were \$17/MWh or below. According to SPP's findings, in those weeks LMPs may have been suppressed by 10.5 percent or more.

4. Price distortions caused by uneconomic self-commitments create a barrier for renewable generation and merchant generation.

Uneconomic self-committed units have a "muting" effect on price signals in the market. The bottom line is that this market suppressive effect impedes market development of renewables and merchant generation and hurts the profit margins of competitive renewable energy developers.

SPP's estimated \$2/MWh price suppressive impact of uneconomic self-commitment is significant. Renewable energy developers often rely on fairly thin margins, particularly once their power purchase agreement (PPA) structures are expired. It isn't uncommon for a PPA to cover just the first years of a development, and the profit margin to be realized after a PPA expires. The suppression of market prices both biases the prices at which utilities are willing to sign PPAs (which are priced on expectations of long-term market prices, or in this case suppressed market prices), and the profits realized by those renewable energy developers that do rely on spot pricing.

Moreover, the price suppressive effect of uneconomic self-committed units in SPP impact the basis risk of PPAs signed between developers and offtakers. PPAs are typically settled at hub prices and the differential between hub prices and nodal prices constitutes the basis risk for developers. Because it is highly unlikely that self-committed units in SPP are suppressing all nodal prices equally, the price suppressive effect is probably disproportionately negatively effecting developers of power plants near self-committed plants.

5. The increased costs of self-committed units in SPP's day-ahead market are borne by customers.

Ultimately, ratepayers are negatively impacted by uneconomic self-commitment behavior in SPP, and they bear the costs of continuing to run uneconomic units in the region. (*See generally* London Economics International, LLC. [“Study of Retail Rates of Kansas Electric Public Utilities”](#) (January 2020) showing that the costs of self-scheduled units are being incurred by ratepayers.)

If production costs are higher than they should be by an estimated ~\$1 million per week, but that production cost increase is the function of a dozen coal generators from two or three utilities, it is the ratepayers of those two or three utilities who are paying the excess costs through state rate case and fuel proceedings that generally compensate utilities the full costs incurred to operate their units. In other words, those specific utility ratepayers are the ones who bear the cost of uneconomic dispatch and depressing market prices.

6. SPP's assessment of “reasons that a resource might self-commit” are overbroad.

SPP lists five reasons why a “resource might still self-commit” even in the presence of a multi-day signal, including regulatory exemptions, testing, weather, fuel contracts, and operational limitations. This listing is overly broad. With the exception of testing, a rare circumstance, the remaining reasons are concerning:

- a. Regulatory exemptions: It is unclear what types of “regulatory exemptions” might be assessed by SPP as a reason that a unit might schedule itself out of merit, and if this practice were widespread or allowable, the market impacts could be substantial. SPP should not provide blanket coverage for “regulatory exemptions” that could readily change market dynamics to the disadvantage of competitive generators. An acceptance of widespread exemptions is to the detriment of a robust and transparent market.
- b. Weather: with the exception of extraordinary reliability requirements, and emergencies called by SPP, excusable self-commitment is unlikely to be a weather-based phenomenon. SPP is

well equipped to handle emergency call and reliability requirements without relying on utility elections to self-commit generators.

c. Fuel contracts: Fuel contracts may have impacts on a generators' assessment of its marginal costs or the penalties that it could incur by not operating, but these impacts are both adjustable through the generators' assessment of its marginal costs, and its bids, and should not be reflected in self-commitment.

d. Operational limitations: Units bid their operational limitations into their offer curves. While it is the case that increased full unit cycling incurs higher operation and maintenance costs, those costs can - and are - reflected in unit startup and shutdown costs, and should not result in additional reasons to self-commit.

7. A multi-day product may be an incomplete solution to address uneconomic self-commitment in SPP.

A multi-day product is designed to send a market signal for commitment, but operators that rely on extended self-commitment, or have a history of uneconomic self-commitment, still may have no incentive to use that market signal. The vast majority, if not all, of self-committing thermal steam units in SPP are owned by rate-regulated utilities or public power entities that recover their costs through ratepayers. These units recover operational costs regardless of if they rigorously follow market signals, or ignore them completely, a level of oversight that has historically turned to regulators or public power managers. Adding an additional market signal is potentially useful, but it does not guarantee that participants will elect to use that signal.

Additionally, the grid is increasingly in need of more flexibility. With increased adoption of wind and solar resources, coupled with dynamic load sources that will change demand profiles, SPP should be focused on market rules that help unlock latent flexibility in the current grid. A multi-day market product is accommodating of long lead time, inflexible resources that the grid will be relying less and less on. It is a more prudent use of SPPs time to focus on rules that will help encourage flexibility.

Instead, or in addition to a multi-day market signal, SPP should consider the following:

a. Increase the rigor of oversight conducted by the market monitor and the market itself in ensuring that bids are reflective of marginal production costs, a process that will require some level of additional audit and review.

b. An expectation that, except for extraordinary circumstances, such as testing, units submit to SPP's economic commitment mechanism, and are thoroughly reviewed when they do not.

c. Penalties for generators that are found to be consistently committing out of merit, commensurate with the degree to which uneconomic self-commitment has resulted in suppressive market prices to competitive energy generators.

d. Focus on rules and market procedures that increase latent flexibility of the grid and promote new flexible resources.

References:

Sierra Club "[Playing with Other People's Money: How Non-economic Coal Plants Distort Energy Markets](#)" (October 2019)

Sierra Club, [“Backdoor Subsidies for Coal in the Southwest Power Pool”](#) (2017)
Union of Concerned Scientists, [“Used but How Useful: How Electric Utilities Exploit Loopholes, Forcing Customers to Bail Out Uneconomic Coal-Fired Power Plants”](#) (May 2020)
London Economics International, LLC. [“Study of Retail Rates of Kansas Electric Public Utilities”](#)
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