

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of an Investigation of Missouri)	
Jurisdictional Generator Self-Commitments into)	File No. EW-2019-0370
SPP and MISO Day-Ahead Energy Markets)	

Sierra Club Comments on Staff Report

Sierra Club respectfully submits the following comments in response to the public report filed in this matter by the Missouri Public Service Commission Staff on August 23, 2019.¹ Self-commitment is an issue of significant importance to Missouri electric consumers, and we commend the Commission and Staff for their foresight and efforts in proactively examining self-commitment practices for the first time. That said, Staff’s report reveals that the central question stated by the Commission in its order initiating this investigation of self-commitment and self-scheduling— “to determine if such practices inure to the benefit of ratepayers”—remains unanswered.²

The reporting by the utilities, and Staff’s subsequent report, clearly demonstrate that the utilities are neither versed in assessing the costs of self-commitment practice, nor equipped to consistently report the impacts of the practice when required. Due to these information gaps, Staff’s assessment is vaguely reported and deeply hedged. While Staff acknowledges that utility reporting was inconsistent and its own analytical capacity limited, it provides a substantial benefit of the doubt to the utilities, particularly with respect to the operational concerns raised by the utilities. Sierra Club believes that self-commitment, and dispatch practice in general,

¹ Missouri Public Service Commission Staff Report (hereinafter “Staff Report”), In the Matter of an Investigation of Missouri Jurisdictional Generator Self-Commitments into SPP and MISO Day-Ahead Energy Markets, File No. EW-2019-0370 (Aug. 23, 2019).

² Order Opening an Investigation of Missouri Jurisdictional Generator Self-Commitments And Self-Scheduling (“Initial Order”), File No. EW-2019-0370 (June 5, 2019).

requires further investigation, better reporting by the utilities, and a consistent approach to identify ratepayer impacts. We are encouraged by Staff's intent to continue investigating this matter in fuel adjustment proceedings. In order for the Commission to ensure fair rates, the utilities must develop a consistent approach to determining when self-commitment serves ratepayer interests and must be prepared to report the losses or gains incurred through self-commitment practice.

A. Staff's report is inconclusive as to whether self-commitment harms ratepayers

Staff's analysis reveals that utility reporting of self-commitment and dispatch practice is inconsistent and poorly characterized. The report makes clear that Staff took on the burden of conducting analyses on the commitment and dispatch practices of the utilities, rather than the utilities providing a sufficiently complete and clear evidentiary record necessary to establish prudent dispatch practice.

As a general matter, all the information in the record—namely, information submitted in response to the Commission's initial order, the revisions to that information, and Staff's characterization of those data responses—demonstrates that the utilities are not versed in analyzing self-commitment in a manner necessary to determine whether the practice results in net costs or benefits to ratepayers. Nor is there uniformity among the utilities with respect to data reporting and analysis of the practice. The Commission's order initiating this investigation expressed an intention that utilities would provide sufficient information for Staff to conduct an effective investigation.³ Staff similarly requested that utilities "provide the economic impact of .

³ Initial Order at 2.

. . scenarios” in which “a utility may self-commit instead of bidding into a given market.”⁴ The record shows that the utility submissions were inconsistent in what they elected to report, if they characterized net gains or losses due to self-commitment, and even what amount of generation was considered self-committed. This lack of clarity left Staff in a position of creating an analysis out of whole cloth.

Staff’s comments that it conducted an analysis of “market bid information,” “looked at Locational Marginal Prices (“LMP”) in the day ahead (“DA”) market,” and “calculated a DA energy cost as well as a DA revenue amount at the DA cleared level of generation,” reveal that the burden largely fell on Staff to develop the basic data needed for this assessment. Sierra Club believes that it was incumbent on the utilities to provide such information, and indeed, to have already conducted such assessments on an ongoing and continuous basis on behalf of their ratepayers in the normal course of providing reasonably least-cost and reliable service. The fact that Staff itself needed to generate such analyses strongly indicates that the utilities have little or no experience in producing such assessments internally or externally.

Staff states that it requested “hourly bid information, generator characteristics, and load node information,”⁵ and conducted four identifiable assessments:

- A. A review of market bid information to “identif[y] any areas that changed abruptly;”⁶ and “review[] unit offer data, physical unit characteristics, and fuel prices;”⁷

⁴ Missouri Public Service Commission Request for Comments, In the Matter of an Investigation of Missouri Jurisdictional Generator Self-Commitments Into SPAA And MISO Day-Ahead Energy Markets (“Request for Comments”), EW-2019-0370 (June. 21, 2019) at 1.

⁵ Staff Report at 5.

⁶ *Id.* at 5.

⁷ *Id.* at 6.

- B. An analysis “to determine which coal plants were operating at a loss or turning a profit consistently;”⁸
- C. A review of LMP in the DA market to determine “DA energy cost as well as DA revenue amount;”⁹ and
- D. An “analysis of the number of hours by month that each unit was dispatched at its economic minimum under self-commit or must-run status.”¹⁰

Despite these efforts, Staff was unable to provide a conclusion in response to the Commission’s core directive to “determine if [self-commit and self-scheduling] practices inure to the benefit of [utility] ratepayers.”¹¹ Of particular concern is Staff’s emphasis on the bids provided by the utilities to MISO and SPP. The comparison of a utility’s bids against market prices is only meaningful so long as the bids reflect the actual, and entire, short-term variable cost of generation. But as Staff notes, a utility’s bidding strategy may not be tied to actual production costs.¹² If, for example, a utility incurs substantial costs through fixed amount fuel contracts, or characterizes operations and maintenance (“O&M”) costs as fixed, rather than variable, these will have the effect of lowering the bids sent by the utility to the markets. Under these circumstances—with which Sierra Club has ample prior experience in other jurisdictions

⁸ *Id.* at 5.

⁹ *Id.* at 6.

¹⁰ *Id.* at 13.

¹¹ Initial Order at 1-2. Staff acknowledges that it is unable “to determine the level of benefit or detriment to ratepayers” of the utilities’ self-commitment practices, because doing so would require Staff to “run a simulation of a historical period, changing the must-run status for day ahead and real time markets while making sure all ancillary services are met.” Staff Report at 12. While Sierra Club does not question the technical resource and time limitations that Staff has faced in this investigative matter, it is important to acknowledge that key issues of concern to the Commission remain unexamined.

¹² Staff Report at 13.

and with other utilities—the bids are *not* an accurate or reasonable representation of the production costs incurred by ratepayers or, as a corollary, whether plants are running economically (including relative to alternatives). Insofar as the rates paid by captive utility customers are based in the cost of generation, it is that cost, and not the utility’s bidding strategy, that impacts rates. The Commission’s order initiating this investigation properly focused on “the difference between *production costs* and corresponding prevailing market prices,”¹³ which is the relevant analysis that should be considered in future examinations of these practices in order to truly understand the impact on consumers.

Staff summarizes the reasons provided by the utilities for self-committing,¹⁴ but does not characterize if and when these circumstances occur, or if these reasons are sufficient to explain the behavior of coal plants operated by the utilities. For example, two of the reasons provided by Staff, which appear to account for a vast majority of hours in which units self-commit, are “low gas prices that reduce the opportunity for coal units to be economically cleared in the day ahead market,” and “a risk-averse business practice approach.”¹⁵

Staff’s identification of the key issue—that self-commitment often occurs when the cost of production exceeds market prices because coal units are not clearing the day ahead market—is only tangentially discussed by the utilities. The record shows that there are substantial numbers of hours or days in which the market cost of energy is far lower than the production cost of operating a coal plant. At times, Staff implies that there is no problem, reasoning that utilities self-commit to bridge these low-cost hours and ultimately net a benefit by operating in high-cost hours. However, Staff’s description of its analysis does not actually conclude that the units

¹³ Initial Order at 2 (emphasis added).

¹⁴ Staff Report at 6

¹⁵ *Id.*

succeed in netting a customer benefit or are actually operated rationally. Indeed, Staff's language is fundamentally hedged, stating that "to the extent that the generating units are operating at a profit," customers are not actively harmed "since revenues seem to exceed costs."¹⁶ There is substantial room within this uncertainty for systemic imprudent behavior on the part of the utilities that is neither reported nor captured through Staff's assessment. There is growing evidence that certain units are operating for continuous months at a time at a loss, during which the short term capture of a few hours of high prices is not a rational reason for self-commitment. This is not "a risk-averse business practice approach;" this is instead a transference of risk, and cost, to ratepayers.

As a general matter, Staff gives credence to certain *potential* benefits to ratepayers, as well as avoided risks, associated with self-commitment. For example, Staff states that load node LMPs are depressed when units dispatch out of merit order, and suggests that customers could thus receive a benefit of decreased purchased power prices.¹⁷ However, Staff does not assess how much excess production cost—from increased fuel use and O&M for example—may have been absorbed by ratepayers to reduce LMPs, or whether any savings associated with depressed LMPs result in a net benefit or net loss. There no reason to believe, *a priori*, that the benefit of market price suppression exceeds the costs of dispatching out of merit order.

Ultimately, the responsibility to demonstrate that their commitment and dispatch practices benefit customers rests upon the utilities, not Staff. One of the utilities acknowledged

¹⁶ *Id.* at 12.

¹⁷ *Id.*

that impact on LMPs would be a key component of understanding benefit to ratepayers,¹⁸ yet revealed that it had not conducted any analysis of those impacts. This strongly suggests that potential benefit or harm to consumers does not drive the utility's decisions about whether to self-commit.

Staff discusses how changes in self-commitment strategy could “increase the benefit to customers through maximization of off-system sales revenue and minimization of fuel costs.”¹⁹ At the same time, Staff acknowledges that a reduction in self-commitment strategy has the theoretical potential to harm customers through “increased outage rates, decreased off-system sales revenue, increased operations and maintenance costs, shortened life of assets, increased outage frequency, decreased reliability, increased LMPs at the load node, and/or generally increased energy prices across the RTO's footprint.”²⁰ This raises several concerns. First, ratepayers deserve to have a meaningful understanding of the costs incurred through the strategy that utilities are deploying today, and not to be burdened by any unnecessary and unreasonable costs under vague operational assumptions. Second, Staff's assertion that customers would see a benefit through the “maximization of off-system sales revenue” is problematic if it is not compared against the costs of generating such excess off-system sales. In particular, such a view encourages utilities to ascribe as much cost as possible to fixed categories, such as fixed fuel contracts, to further produce off-system sales, but at a net cost to ratepayers. Finally, it is ultimately the responsibility of the regional transmission organizations (*i.e.*, MISO and SPP) as balancing authorities to ensure short term system reliability. It is inappropriate for utilities to use

¹⁸ Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company Response to Commission Questions, File No. EW-2019-0370 (July 8, 2019), at 4-5.

¹⁹ Staff Report at 13.

²⁰ *Id.*

self-commitment to second-guess the markets and the reliability responsibilities of MISO and SPP.

Overall, due in large part to limited time and nonspecific responses from the utilities, substantial unanswered questions regarding the impacts of self-commitment on consumers remain. Fortunately, the Commission has further opportunities to closely evaluate these issues in other regular proceedings. Staff and the Commission are more than capable of determining whether the utilities' costs and practices are prudent, if the utilities provide the requisite data.

2. Further investigation through prudence reviews in fuel adjustment clause proceedings is warranted.

Sierra Club supports Staff's stated intention to continue investigating the prudence of self-commitment practices through fuel adjustment clause ("FAC") proceedings, at least. Specifically, "Staff plans to monitor the number of hours that units are dispatched at their economic minimum under self-scheduled or must-run status without any additional dispatch under the economic or market status in future prudence reviews."²¹ This plan reflects Staff's earlier statement that whether a unit is only "dispatched at the economic minimum under self-commit status for a high number of hours in a given month" is a potential indicator of imprudent self-commitment practices.²²

Staff's proposal is a sensible starting point to identify whether imprudent self-commitment practices are occurring. However, the periodic reports, periodic FAC adjustment proceedings, and rate adjustment mechanism prudence reviews under 4 CSR 240-20.090(5), (8), and (11), respectively, present additional opportunities to explore the reasonableness of these practices.

²¹ *Id.*

²² *Id.*

This information would include not only the number of hours during which a unit is self-committed but has no economic dispatch above its economic minimum, but also information about the unit's full production costs, including fuel costs (disaggregated to identify any portion of fuel costs the utility deems fixed or variable), fixed and variable operations and maintenance costs, bids, and LMPs associated with self-committed, self-dispatched, and any economically-committed or dispatched portions of its output. Simply knowing the number of hours that a unit self-committed without additional generation above the economic minimum, does not permit meaningful assessment of the prudence of the utility's self-commitment decision; it can only raise a question requiring further investigation.

Notwithstanding the often rapid pace of FAC prudence reviews and the limited time resources of Staff and other parties, the prudence of self-commitment and self-dispatch (and associated costs) can be effectively evaluated *if* the utilities file additional data with any periodic FAC adjustment application, rate adjustment mechanism prudence review, or any periodic reporting proceeding under 4 CSR 240-20.090.

It would greatly assist Staff and other parties in evaluating the prudence of these practices if utilities were required to submit information relevant to self-commitment and self-dispatch practices as part of the periodic reports. At a minimum, utilities should be required to include, as part of their filing, total bid formulation and production cost data (not just fuel costs), including:

- a. Net generation (MWh), by month;
- b. Gross revenues from market energy sales by month;
- c. Gross revenues from the sale of ancillary services by month;
- d. Gross revenues from congestion, if tracked, by month;

- e. Explanation for any manual commitment decision including “economic,” “self-dispatched,” “reliability,” or other recorded purposes;
- f. Number of hours during which a unit(s) was self-committed or self-dispatched and net gain or loss during those hours;
- g. Total fuel cost (\$/MWh), by month;
- h. Fuel cost as used in the variable cost of production (\$/MWh) if different than total fuel cost (i.e., identifying any portion of fuel costs the utility deems fixed);
- i. Variable operations and maintenance (“O&M”) costs (\$/MWh);
- j. Variable O&M costs as used in the variable cost of production (\$/MWh) if different than total variable O&M costs;
- k. Emission costs (\$/MWh); and
- l. Any other adders or shadow prices, and an explanation of such prices.

Such additional requirements may need to be considered by the Commission in general rate cases when establishing new rate-adjustment mechanisms, or in subsequent periodic reporting proceedings, FAC adjustment proceedings, or rate adjustment prudence reviews under 4 CSR 240-20.090(5), (8), and (11), respectively. With respect to periodic reporting requirements and fuel clause adjustment proceedings under 4 CSR 240-20.090(5) and (8), we note that the Commission already has authority to require submission of this information. We recognize, however, that the Commission may need to amend its rules at 4 CSR 240-20.090(11) to augment rate adjustment prudence review proceedings.

3. Utilities should clarify and formalize the processes by which they determine if self-commitment is justified.

As noted above, Staff's report and the utilities' filings in this docket show that the utilities on the whole do not have a consistent set of practices by which they determine if self-commitment is justified, and moreover that particular utilities lack even internally consistent practices. Universally in this proceeding, whereas the utilities identified circumstances under which self-commitment may be warranted, they failed to identify a process through which they assess if the practice will actually benefit customers at any given time. In other words, the utilities appear to be operating largely on auto-pilot.

Sierra Club recognizes that the market structures of MISO and SPP are imperfect with respect to economic dispatch signaling for slow ramping generators, *i.e.*, those with high start costs. The impact of excessive startup and shutdown cycles on coal generators can be expensive, and steam boilers generally do not have the flexibility to come online with less than 24 hours notice. Ideally, these generators could be provided a multi-day market price signal which would allow a centralized optimal dispatch. However, recognizing that such a market structure may not be developed soon, it is incumbent on the utilities to seek to minimize their costs of production, and act competitively by following the market as often as feasible. Maintaining a unit unnecessarily at above-market costs for extended periods unreasonably harms ratepayers.

Lacking a multi-day market, the utilities should develop a clear framework to assess potential forward market prices, assess the likely costs of dispatch against those prices, and make an informed commitment determination. In Sierra Club's experience, many utilities continue to use a qualitative matrix to determine commitment, ranging from a "gut" assessment of if the unit is likely to be required in the next few days to a rough assessment of if self-commitment will consume sufficient coal under a take-or-pay contract. The evidence suggests that Missouri

utilities do not have a clear analytical framework, and do not regularly assess if their plants operate for the overall cost benefit of their customers.

The Commission should ensure that utilities are making use of a transparent, structured analytical framework to guide their commitment and dispatch practices. Transparency and a consistent analytical framework are essential to demonstrating prudent operation of the utility's generation facilities, and in turn to justifying cost recovery either in rate base or through a FAC.

To that end, we urge the Commission to reevaluate both the process for reviewing periodic FAC adjustment requests and rate adjustment mechanism prudence reviews. First, under the Commission's rules governing periodic FAC adjustment proceedings, 4 CSR 240-20.090(8), we note that Staff has only 30 days to review such requests and make a recommendation to approve or reject; intervenors have only 40 days to respond. *See* 4 CSR 240-20.090(8)(F)-(H). This short period of time is generally insufficient for Staff or any other party to obtain discovery and meaningfully review a utility's fuel costs and dispatch practices. Similarly, in prudence reviews under 4 CSR 240-20.090(11), intervenor customers and other parties have limited ability to "ground truth" a utility's dispatch practices. While Staff has 180 days to conduct rate adjustment prudence reviews, affected customers and other intervenors have only 10 days to supplement or respond to Staff's assessment. Again, this short period of time is insufficient to review a utility's voluminous and technically complex bid formulation and production cost data, and meaningfully respond to Staff's assessment. Accordingly, we urge Staff to recommend amending the Commission rules at 4 CSR 240-20.090(8) and (11) to ensure that both Staff and intervenors have a full and transparent opportunity to review dispatch practices in the context of fuel adjustment proceedings.

4. Conclusion.

Sierra Club appreciates the work of the Commission and Staff to begin exploring this important topic. Although this proceeding was inconclusive as to whether the utilities' self-commitment practices harm or benefit ratepayers, some important information and considerations have been brought to light that can guide future evaluations of self-commitment practices. It is essential that the Commission timely follow up on this groundwork in order to continue honoring its duty to protect ratepayers.

Respectfully submitted,

Joshua Smith
Senior Staff Attorney
Sierra Club
2101 Webster, Suite 1300
Oakland, CA 94612
415.977.5560 phone
joshua.smith@sierraclub.org

Casey Roberts
Senior Staff Attorney
Sierra Club
1536 Wynkoop St., Suite 200
Denver, CO 80202
303.454.3355 phone
casey.roberts@sierraclub.org

Henry B. Robertson
Great Rivers Environmental
Law Center
319 N. 4th St., Suite 800
St Louis, MO 63102
314.231.4181 phone
hrobertson@greatriverslaw.org

CERTIFICATE OF SERVICE

I hereby certify that a true and correct PDF version of the foregoing was filed on EFIS on this 6th day of September, 2019, as well as sent to the certified service list for this docket.

/s/ Casey Roberts
Casey Roberts