STATE OF MISSOURI
PUBLIC SERVICE COMMISSION

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**

JOINT INITIAL COMMENTS OF ADVANCED POWER ALLIANCE AND CLEAN GRID ALLIANCE

NOW COMES Advanced Power Alliance and Clean Grid Alliance (jointly referred to as Clean Energy Organizations or "APA-CGA"), filing comments in the above captioned docket in response to Request for Comments filed by Staff on June 21, 2019, and pursuant to the Order Opening an Investigation of Missouri Jurisdictional Generator Self-Commitments and Self-Scheduling of the Commission filed on June 5, 2019, and the Order Extending Time for Filing Responses of the Commission and filed on June 27, 2019.

This case is an investigation, initiated by the Commission, into the self-commitment and self-scheduling practices of Missouri's investor-owned electric utilities into the energy markets of their respective regional transmission organizations. The purpose is to determine whether the utilities' practices are to the benefit of their customers.

I. Introduction of Advanced Power Alliance and Clean Grid Alliance

The Advanced Power Alliance (formerly known as "The Wind Coalition") is a not for profit association formed to encourage the development of the wind and solar energy resources of the south-central United States as well as technologies such as battery storage. The Advanced

Power Alliance (APA) is active in two particular regions: the Southwest Power Pool ("SPP") and the Electric Reliability Council of Texas ("ERCOT") grid systems, which cover all or part of thirteen states (Texas, Oklahoma, Kansas, Nebraska, Missouri, Arkansas, Louisiana, New Mexico, South Dakota, North Dakota, Louisiana, Iowa and Montana). The APA's members include developers, manufacturers and public interest advocates. Members of APA operate plants in Missouri and also have contracts to provide energy to utilities in Missouri.

Clean Grid Alliance (formerly known as "Wind on the Wires") is a not-for-profit corporation organized and existing under the laws of the State of Minnesota. Clean Grid Alliance (CGA) is a collaborative organization dedicated to renewable energy's fair access to the electric transmission system and market throughout the Midwest. CGA's Board of Directors and members are comprised of non-utility wind, solar and storage developers, environmental organizations, renewable energy experts, tribal representatives, clean energy advocates, and businesses providing goods and services to the wind and solar industry in Missouri and across the country. Members of CGA operate plants in Missouri and also have contracts to provide energy to utilities in Missouri.

II. APA-CGA Comments

The APA and the CGA thank the Missouri Public Service Commission for opening this docket into the self-scheduling and self-commitment of generation into the MISO and SPP markets. The topic is important to Missouri utility customers, as well as the robustness of the RTO markets in which Missouri's PSC jurisdictional utilities operate. APA-CGA look forward to the dialogue about this practice and its impact on markets and consumers.

Regional Transmission Organizations have become a critical part of the overall business of electric utilities in Missouri since the Commission first approved of its regulated utilities joining

MISO and SPP over a decade ago. Since then the Commission has since been heavily involved through the Organization of MISO States and the SPP Regional State Committee in helping to shape the policies of the RTOs, as well as increasing its level of understanding of how RTO policies and utility activity within these wholesale markets impact Missouri ratepayers. The issue before the Commission in this case goes directly to the heart of market activity within MISO and SPP. The self-commitment and self-scheduling of generation can undermine the transparency created by these markets, as well as the overall goal of producing a reliable and economic generation commitment and dispatch that is good for consumers. Self-commitment refers to a process by which generators are committed (brought or kept online) outside of the regional generation commitment process conducted through the RTO's day-ahead electricity market. Self-scheduling refers to the submission of generator dispatch schedules outside of the RTO's regional dispatch through the real-time electricity market.

The SPP and MISO energy markets are day-ahead and real-time clearinghouses of offers to provide electric energy and other reliability services products, such as regulation and spinning reserves. By providing market participants an opportunity to offer these products into the RTO market, load in the RTO region is served by the lowest cost resources available. The market is transparent and overseen for market power violations by Market Monitors and the Federal Energy Regulatory Commission.

Before regional markets were established, individual utilities largely relied on their own generation resources to meet their load and provide ancillary services. While it was possible to buy and sell energy between utilities, such activities occurred on a bilateral basis. There was no easy way of determining whether the generation of the utility might have been replaced by lower cost generation owned by another utility. Furthermore, having each utility provide their own balancing

services without netting out diversity in electricity demand at both the planning and operating timescale was very inefficient compared to having a large regional balancing area. MISO has calculated that its large grid operating area and centralized market provides over $3 billion in annual benefits to the region's consumers. Large grid operating areas with centralized markets also facilitate the integration of substantial levels of renewable generation.

The self-commitment and self-scheduling of units in SPP and MISO is not prohibited. However, the use of self-scheduling and self-commitment can result in less transparency in the market. More importantly for retail rates, self-commitment and self-scheduling can cause customers of the utility to pay higher prices for energy than they would have otherwise paid if the utility had procured from market resources. Self-committed and self-scheduled generation is often less responsive to market prices, reducing the flexibility of the power system to efficiently respond to changes in electricity supply and demand. The provision of excess energy from self-scheduled and self-committed generators can suppress market prices, harming other more cost-effective generators and undermining market efficiency.

Various studies of this practice have concluded that self-committed and self-scheduled generation, to the extent other generation was available in the market at a lower cost, adds to the costs that are passed through to electricity consumers. A recent assessment of the use of self-scheduling of coal plants in PJM and MISO by the Wind Solar Alliance estimates that it resulted in excess fuel costs of at least $85 million in PJM and $127 million in MISO in 2017.[1] That report explains its methodology as follows:

> Our approach was to identify coal plants that are operating at significantly higher capacity factors than would be predicted based on their economics as a statistical indicator of the amount of coal generation that is being self-scheduled. The net cost of the generation provided by these plants in excess of levels that appear to

[1] Michael Goggin and Michael Milligan, "The Consumer Benefits of the Market in the Customer Focused and Clean Report", prepared for Wind and Solar Alliance, at 8,9 (March 2019).

> economic was then calculated…As expected, the general trendline is that generators with lower marginal production costs operate at higher capacity factors. However, a number of coal plants are outliers above that trendline, in that they operate at relatively high capacity factors even though their marginal production costs are higher than other plants… Using that method, excess fuel costs due to coal plant self-scheduling in 2017 were calculated to exceed $85 million in PJM and $127 million in MISO.[2]

The assessment suggests that the total costs of self-scheduling are likely far greater than that estimate:

> This is likely a conservative estimate of the full cost of self-scheduling, as it does not include the fixed and carrying costs associated with the retention of coal plant capacity that would be uneconomic without self-scheduling. It also does not capture the balancing and operating reserve costs that can be imposed on other resources because self-scheduled plants tend to provide less flexibility to the power system. Finally, it does not include marginal production costs other than fuel, such as variable O&M costs, which may be higher at self-scheduled plants than at other coal plants. Recent analysis using a similar methodology but also using proprietary data on plant-specific variable O&M costs found self-scheduling costs that are higher than those indicated here.[3] Our results, which were calculated entirely using public EIA data and therefore only used plant-specific fuel costs, lend support and confirmation to the results of that previous analysis. We believe that both of our analyses provide sufficient evidence of the high cost of self-scheduling for state regulators, Independent System Operators (ISOs) like PJM and MISO, and ISO market monitors to use their access to confidential plant-specific cost and scheduling data to further examine the issue.[4]

That other study, sponsored by the Union of Concerned Scientists, suggests that the total cost to consumers in MISO, SPP, PJM and ERCOT is even higher.

> The latest results suggest that, across the four coal-heavy energy markets, coal-fired power plants incurred $4.6 billion in market losses over the past 3 years or $1.5 billion dollars in market losses each year. Most of these 'losses' were incurred by power plants owned by monopoly utilities and are not absorbed by the investors or owners. Rather, those costs were likely covered by customers. Consequently, I

[2] Id.
[3] *See* Joseph Daniel for Union of Concerned Scientists, "The Coal Bailout Nobody is Talking About" (Sept. 24, 2018); available at: https://blog.ucsusa.org/joseph-daniel/the-coal-bailout-nobody-is-talking-about
[4] Goggin and Milligan, "The Consumer Benefits of the Market in the Customer Focused and Clean Report" at 9.

> estimate this practice places a least a $1 billion burden on utility ratepayers each year.[5]

The study found that a large share of those costs were caused by regulated power plants in MISO, which accounted for over $500 million in annual costs.[6] SPP power plants accounted for around $300 million in annual costs:

> This new analysis builds on earlier work of mine[7] that investigated this issue in the Southwest Power Pool, SPP, the market that covers several great plains states. My original analysis calculated that ratepayers were incurring a burden of $150 million a year from just a few power plants. The new analysis (which includes all coal units in SPP) indicates that the number is closer to $300 million a year, just for SPP.[8]

The concerns about self-commitments in the markets have been highlighted by the SPP Market Monitor as well. In a 2018 SPP Market Monitoring Unit report the impact of these out of market commitments was noted along with a recommendation that work be done to minimize the activity. The report stated:

> However, it is imperative to minimize the need to self-commit resources to realize the full benefits of SPP's market. While there may not be a single reason causing market participants to self-commit resources, there can be ways that SPP and its stakeholders can work to minimize the need to self-commit.
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> For instance, long lead-time and long run-time resources are often self-committed and contribute to depressing prices in the SPP market. These resources are not appropriately evaluated in the current market structure and can be committed by market participants during uneconomic periods.[9]

The self-commitment of resources into the market means that other resources that may have been lower cost are not being dispatched. In effect the load being served by the market is

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[5] Daniel for Union of Concerned Scientists, "The Coal Bailout Nobody is Talking About."
[6] *See* Joseph Daniel, "Out-of-Merit Generation of Regulated Coal Plants in Organized Energy Markets"presentation to USAEE/IAEE North American Conference – Evolving Energy Realities: Adapting to What's Next (Sept 23-26, 2018) at 8; available at http://www.usaee.org/usaee2018/submissions/Presentations/Out-of-Merit%20Dispatch%20In%20organized%20Energy%20Markets%20Final.pdf.
[7] *See* Joseph Daniel for Sierra Club "Backdoor Subsidies for Coal in the Southwest Power Pool. Are Utilities in SPP Forcing Captive Customers to Subsidize Uneconomic Coal and Simultaneously Distorting the Market?" ; available at https://docs.wixstatic.com/ugd/9a40c0_ee41d4bce9da47d6bbead0b724065df0.pdf
[8] Daniel, "The Coal Bailout Nobody is Talking About."
[9] SPP Market Monitoring Unit, "State of the Market 2018", at 243 (May 15, 2019); available at https://www.spp.org/documents/59861/2018%20annual%20state%20of%20the%20market%20report.pdf

reduced by the amount of energy coming from these self-committed resources. This means that the customers of the utility self-committing the resource are subsidizing dispatching a resource. By dispatching this unit when it was more economic to instead pay for lower cost resources from the market to meet the utility's load requirements, these consumers are paying higher retail rates. Because in many cases the costs of generation are passed through directly to consumers through the fuel adjustment clause, utility customers and not shareholders are paying for these costs.

Because the fuel adjustment clause and other retail rate making matters fall clearly in the realm of the Missouri Commission, this is a matter that is appropriate for the Commission to explore. There are instances where arguably self-committed resources can provide benefits to the reliability of the system and lower the costs in the overall RTO market. However, this is being done at the cost of the ratepayers of the utility that is self-committing its units. The customers of a Missouri utility should not be donating such benefits to the other customers of the RTO at the Missouri customers' expense.

III. Conclusion

The APA and CGA applaud the Missouri Commission for opening this docket. As noted above, information about unit-specific commitment and scheduling actions are not typically public, making it impossible for us to conclusively determine that a specific power plant is self-scheduling or self-committing its generation, but the Commission has the authority to obtain that information. We e believe that the Commission can advance the public interest by gathering more information about the frequency and magnitude of those actions, as well as their motivation and impact on customer rates. This information could help ensure that consumers have access to the

lowest cost generation and that RTO energy markets are functioning efficiently. We look forward to the dialogue over the course of the Commission's docket.

Respectfully submitted,

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