

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter, on the Commission's own motion to open a docket for load serving entities in Michigan to file their capacity demonstrations as Required by MCL 460.6.w.	<b>Case No. U-21099</b>
In the matter, on the Commission's own motion, to outstanding issues regarding demand response aggregation for alternative electric supplier load.	<b>Case No. U-20348</b>
In the matter, on the Commission's own motion, to request comment on the MIDCONTINENT INDEPENDENT SYSTEM OPERATOR, INC.'s implementation of Federal Energy Regulatory Commission Order No. 841 regarding energy storage resources.	<b>Case No.U-21032</b>
In the matter, on the Commission's own motion, to open a docket for load serving entities in Michigan to file their capacity demonstrations as Required by MCL 460.6.w.	<b>Case No.U-21225</b>

**Comments of Voltus, Inc. In Response to Commission Order**

Voltus Inc. (Voltus) hereby submits these comments to the Michigan Public Service Commission (Commission) in response to the Commission's June 23, 2022 order requesting responses to questions regarding capacity shortfalls. Voltus only responds to Question 1, supporting eliminating the ban on third party demand response aggregators working with non-retail choice Michigan customers. Voltus is the only demand response aggregator that operates in all nine North American wholesale markets, and we believe that to date we are the only

aggregator working with Michigan Choice customers. Voltus can therefore speak to operational considerations in Michigan, and attest to how load resources can help address capacity shortfalls, ensure grid reliability, integrate intermittent renewables, and reduce consumer costs. Through third party aggregators, the retail electric customers that can curtail their load are already providing the benefits of demand response to Michigan ratepayers. The Commission should expand on this success and eliminate the ban in its entirety.

**I. Voltus’s Past Participation in the Commission’s Proceeding**

Voltus has been an active participant in the Commission’s proceedings. Members of our team attended the stakeholder meetings that were held in February of 2019. We also filed initial comments and reply comments reiterating our position in response to the Commission’s order issued in October of 2020. Through its membership in two trade associations, Advanced Energy Management Alliance (AEMA) and the Advanced Energy Economy (AEE), Voltus has contributed further comments and stakeholder input. Voltus writes separately from those organizations today because Voltus believes that eliminating the aggregator ban is sufficient, without the need for further policy revisions as proposed by AEMA and AEE. Voltus will also provide data demonstrating that additional capacity will be procured if the aggregator ban is eliminated, and explain the processes by which such capacity could be sold to utilities.

**II. Question 1: In light of the tightening capacity market within the MISO footprint and LRZ 7 in particular, the Commission seeks comment on whether the ban on DR aggregation described in the August 8 order should now be lifted.**

**Yes, Voltus respectfully contends that now is the time to remove Michigan’s ban on DR aggregation.** Michigan did not lift the ban in 2020 and is now facing a capacity problem as well as high energy costs. Voltus wrote in November 2020:

Michigan is facing a real threat of supply shortages and transmission constraints for at least the next five years. The MPSC has stated that it desperately needs more local resource to manage this risk because transmission constraints require that nearly 100% of resource adequacy requirements be delivered within MISO Zone 7.<sup>1</sup>

The ban was not eliminated in 2020 and the projected supply shortages have since materialized. Given these facts, it is legally indefensible to maintain that the aggregator ban is truly in the public interest. Michigan has already done significant work to integrate aggregators. These considerations, combined with a rapidly changing energy landscape, make now an ideal time to allow for aggregation across Michigan.

### **Allowing Aggregators Would Quickly Bring Additional Capacity to Michigan.**

Third party aggregators can quickly bring additional load resources into the market. In four years of operating in Michigan, and with only being able to work with about 10% of Michigan's electricity consumers, Voltus has been able to register over 104 MW of resources as Load Modifying Resources (LMRs), and currently has 16.8 MW registered in MISO's spinning reserves. Over the years, Voltus has spoken with hundreds of MW in Michigan that wanted to participate in wholesale market energy markets, but these resources were ultimately disqualified because they were non-Choice customers. Considering the over 50 MW that have been enrolled in MISO by Voltus alone from the mere 10% of Michigan customers who are currently eligible, aggregators could easily unlock 500-1,000 MW across all of Michigan, simply by this Commission eliminating its opt out. Voltus has previously told this Commission of its experience in southern Illinois, in which we were able to develop 800 MWs over a short two years of operation – representing close to 10% of regional load.<sup>2</sup> Such examples demonstrate

---

<sup>1</sup> Comments of Voltus, at 1, *In the matter, on the Commission's own motion, to outstanding issues regarding demand response aggregation for alternative electric supplier load*, Case No. U-20348, (Mich. PSC Nov. 24, 2020) (Voltus 2020 Comments).

<sup>2</sup> See Voltus 2020 Comments at 2. Voltus also noted that, "In contrast, all Michigan utilities have a combined 600 MWs of proven demand response capacity in an approximately 20,000 MW system peak which they've had decades to build up."

concretely the additional resources aggregators can bring to wholesale markets when allowed to compete for the opportunity.

There are numerous reasons aggregators can unlock under-utilized load resources. Aggregators can serve smaller customers that may not qualify for utility DR programs. Aggregators normally assume the penalties that come from under performance, which eliminates the largest financial risk to customers. Aggregators can work with customers to develop individual curtailment plans that align with their operations, and aggregators provide hardware for monitoring load and load curtailment. Aggregators have prioritized developing new technologies to create a “value stack,” whereby they can offer customers dual or tri-partite participation in capacity, energy, and/or ancillary services. This value proposition creates extra capacity, because customers who may not be interested in a capacity product alone enroll in capacity and at least one other service; the value stack makes such participation financially viable. For example, in PJM, stacking capacity participation with synchronized reserves brings MW to market that might find capacity-only participation unprofitable, given PJM’s recent low-priced auction results. Aggregators’ advanced technology and the value stack are critical to incorporating residential load. The Commission itself has noted that third-party aggregators “may have more variety in their DR registrations, including Demand Resource Resources (DRRs), which can participate in the energy/ancillary markets, or Emergency Demand Response (EDRs).”<sup>3</sup> The presence of utility demand response programs does not conflict with the need for aggregators, who specialize in more complex demand side participation.<sup>4</sup>

---

<sup>3</sup> Michigan Public Service Commission, at 13, *Participation of Aggregators of Retail Demand Response Customers in Markets Operated by Regional Transmission Organizations and Independent System Operators*, RM21-14-00 (Fed. Energy Reg. Comm’n July 13, 2021) (“MPSC Comments”).

<sup>4</sup> For example, DTE Electric Company’s pilot for ancillary services is one of the only examples of a utility pilot load to provide ancillary services. See *In the matter of Application of DTE ELECTRIC COMPANY seeking approval of Tariff for Experimental Demand Response Type 1*, Case No. U-21042. Still, this is limited to 5 customers with at least 10 MW of load, while aggregators regularly use 100 kW loads to provide ancillary services in MISO.

Eliminating the ban will rapidly accelerate the procurement of additional capacity, as the ban is the single largest barrier for aggregators in recruiting customers in Michigan. Currently, by banning aggregators from recruiting 90% of customers in Michigan, customer acquisition costs for the remaining 10% far exceed those costs for aggregators in the rest of MISO. Eliminating the ban would increase scalability.

While the Commission asks about how eliminating the ban could address capacity shortages, aggregator demand response is also increasingly important in the energy and ancillary services markets. Customer load flexibility that provides energy and ancillary services dispatches can provide for the integration of higher levels of variable renewable resources into the MISO grid, because dispatches for load resources are often aligned with lulls in renewable generation. Aggregators are continually identifying new ways to use flexible load to balance the grid. Given the region's reliability concerns, Michigan should allow 100% of its customers' flexible load resources to support the grid.

**If The Aggregator Ban Were Eliminated, Existing MISO Processes Could Enable Aggregators to Sell Capacity to Utilities.**

The Commission is no doubt aware that only 8% of MISO's capacity is procured through its residual Planning Resource Auction (PRA). Yet there is a robust market for bilateral capacity transactions, whether through RFPs, auctions, or negotiation. Demand response megawatts that enroll as LMRs with MISO are granted Zonal Resource Credits (ZRCs), which may be monetized by aggregators in two ways: (1) ZRCs can be offered into the PRA and paid the PRA-determined price for capacity if they clear the market, or (2) ZRCs can be sold bilaterally to partners, including Michigan load serving entities (LSEs) for use as self-supply or in Fixed Resource Adequacy Plans (FRAPs). Aggregator-provided ZRCs can be a part of long-term capacity planning by Michigan LSEs if LSEs sign long-term bilateral contracts to purchase

ZRCs. Such contracts could provide additional capacity on a four-year basis pursuant to Section 6w of Act 341.<sup>5</sup>

For example, an energy brokerage called ACES recently operated RFP processes for MidSouth Electric Co-op and Hoosier Energy Rural Electric Cooperative to purchase MISO capacity, including ZRCs, several years into the future. The Illinois Power Agency runs a twice-annual auction for Ameren Illinois to procure ZRCs two years in advance of Fixed Resource Adequacy Plan submission deadlines. Where aggregators may accredit their megawatts as ZRCs, they can increase the supply and therefore decrease the price of the bilateral ZRC market.

If the Commission eliminated the opt out by November 1, 2022, new resources could be enrolled in the 2023/24 MISO PRA. A timely decision would allow aggregators time to contract and test new resources in advance of the December-February enrollment period for MISO Load Modifying Resources. The aggregator experience in Michigan with the 10% of resource eligible for aggregator enrollment proves that allowing third-party aggregation statewide will enable significant additional Michigan based flexible customer load to enroll as load modifying resources in the MISO PRA. This will lower prices in the auction, saving Michigan consumers money on their electric bills while also improving the reliability of the Michigan/MISO grid system.

**Eliminating the Aggregator Ban Now Would Enlist Demand as a Resource While MISO Undergoes a Series of Market Changes.**

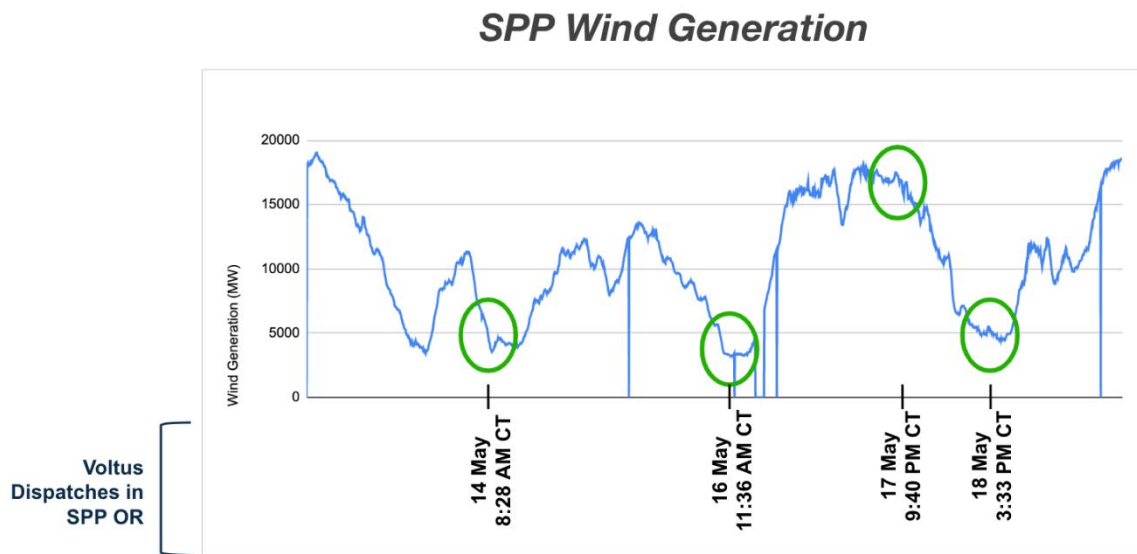
The capacity shortfall across northern MISO is only one of many reasons to eliminate the aggregator ban. The Michigan PSC has stated that it “expect[s] that additional flexibility and increased deployment of DR will be needed to accommodate a changing resource mix.”<sup>6</sup>

---

<sup>5</sup> See Order Question 3.

<sup>6</sup> MPSC comments at 12.

Aggregators, and the unique products they develop from the flexible loads of their customers, can substantially assist in the integration of increasing levels of variable resources into the changing resource mix in MISO. The below chart illustrates this, showing how three of Voltus’s four SPP operating reserve dispatches during one week in May served to blunt the impact of lulls in wind production:



Furthermore, eliminating the ban now would enable load resources to be leveraged as part of the numerous policy changes underway at MISO, like the transition to a seasonal capacity market. Demand response can provide capacity in every season.

Northern and Central MISO, which includes Michigan, is in a capacity crisis and needs every possible resource. Given the success of aggregator service to Michigan Choice customers, and aggregator performance in other vertically integrated states that do not have an opt-out, Voltus firmly believes that lifting the opt-out for customers of commission-regulated IOUs will serve both reliability and cost concerns for Michigan consumers.

## **Operational Processes Regarding Aggregator Participation Have Been Developed.**

This Commission has allowed aggregators to provide value to 10% of Michigan’s customers since 2017 and this has enabled the Commission and the utilities to develop processes to address operational considerations. In Michigan, when an aggregator registers a customer, the load balancing authority (LBA) and the Load Serving Entity (LSE) review the registration, which is also sent to the Public Service Commission for review. This review alerts all parties to customer participation and allows for evaluation to prevent double-counting. Since Michigan already has preexisting processes to incorporate aggregators, such processes could be expanded, and the Commission could develop additional processes if necessary. At this point, there are no unsolvable problems. Michigan is also well-aware that aggregation is not akin to restructuring. Given the work Michigan has done to incorporate aggregators—and the experience in vertically integrated states like West Virginia, Oklahoma, and Kansas that have chosen not to opt out their customers from wholesale markets—Michigan would see sizable benefits in terms of additional capacity, without needing significant additional infrastructure. Few states are so well-positioned to easily add additional capacity.

The Commission wrote last year that the “goal” of the opt out “should be a complimentary framework of retail and wholesale rules that work in conjunction and allow DR resources to realize their full value stack. Such a result could maximize the benefits of DR aggregation for customers and the system.”<sup>7</sup> Voltus maintains that the opt out has served its purpose to date and now all Michigan electric customers should have the opportunity to work with aggregators to help solve Michigan’s capacity problems. Voltus would advise against the

---

<sup>7</sup> Reply Comments of the Michigan Public Service Commission, at 3-4, *Participation of Aggregators of Retail Demand Response Customers in Markets Operated by Regional Transmission Organizations and Independent System Operators*, RM21-14-00 (Fed. Energy Reg. Comm’n Aug. 23, 2021) (“MPSC Reply Comments”).



Commission requiring that this occur through utility-aggregator partnerships. The most capacity will be obtained at the lowest cost by allowing aggregators to compete directly for customers.<sup>8</sup>

### **III. Conclusion**

Only demand response can stand up a (virtual) power plant overnight. If the Commission acts now to eliminate the ban, third-party aggregators will begin enrolling customers in MISO's energy and ancillary services programs in a matter of weeks, and will be able to participate in the next MISO PRA for the 2023/2024 MISO Planning Year. Given the capacity shortfalls and the increasingly unpredictable array of grid catastrophes, further delay is unnecessary and contrary to the public interest. The Commission should opt in for consumer savings, grid reliability and a lower carbon future.

Respectfully submitted,



---

Jon Wellinghoff, Esq.  
Chief Regulatory Officer  
**Voltus, Inc.**  
2443 Fillmore St.  
San Francisco, CA 94115  
(202) 664-6633  
[jwellinghoff@voltus.co](mailto:jwellinghoff@voltus.co)



---

Allison Bates Wannop, Esq.  
Director of Legal and Regulatory Affairs  
**Voltus, Inc.**  
2443 Fillmore St.  
San Francisco, CA 94115  
(617) 548-6221  
[awannop@voltus.co](mailto:awannop@voltus.co)

Dated: September 1, 2022

---

<sup>8</sup> Customers would, for example, have leverage in negotiating their revenue split.