

**STATE OF MINNESOTA  
MINNESOTA PUBLIC UTILITIES COMMISSION**

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In the Matter of a Commission  
Investigation into the Potential Role of  
Third-Party Aggregation of Retail  
Customers

Docket Nos. E999/CI-22-600

**JOINT REPLY COMMENTS OF  
THE ADVANCED ENERGY  
MANAGEMENT ALLIANCE AND  
ENERWISE GLOBAL  
TECHNOLOGIES, LLC D/B/A  
CPOWER**

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**I. INTRODUCTION**

The Advanced Energy Management Alliance (AEMA) and Enerwise Global Technologies, LLC d/b/a CPower (CPower) submit these reply comments in response to initial comments submitted in response to the Minnesota Public Utilities Commission (Commission) Notice of Comment Period, issued December 9, 2022, and Notice of Extended Reply Comment Period, issued February 6, 2023, regarding the potential role of third-party aggregation of retail customers in retail and wholesale markets. AEMA and CPower appreciate parties' thoughtful comments regarding the role of third-party aggregation of demand response and other distributed energy resources on behalf of retail customers in Minnesota. These reply comments address comments and recommendations raised by several parties, including the Department of Commerce (Department), Xcel Energy (Xcel), and Legal Services Advocacy Project, Mid-Minnesota Legal Aid, Energy CENTS Coalition, International Union of Operating Engineers Local 49, North Central States Regional Council of Carpenters, and LIUNA Minnesota and North Dakota (collectively, the Low Income Consumer and Worker Advocates). Please note that all references

to Aggregators of Retail Customers (ARCs) or aggregators herein refer to third-party, non-utility, aggregators.

## II. REPLY COMMENTS

### A. AGGREGATORS PROVIDE VALUABLE SERVICES TO RETAIL CUSTOMERS THAT A UTILITY CANNOT

AEMA and CPower appreciate the legal analyses regarding the role of aggregators in Minnesota's regulatory framework addressed by Sierra Club and Union of Concerned Scientists (USC) and the Department of Commerce (Department).<sup>1</sup> Aggregators do not sell electricity to retail customers. Rather, aggregators aggregate consumers' commitments to curtail their electric use. Utilities have a monopoly to provide retail electric service to customers in their service territories,<sup>2</sup> but they do not have a monopoly over retail customer behavior.

The Federal Energy Regulatory Commission (FERC) regulates wholesale markets. The United States Supreme Court ruled that FERC has the authority to regulate wholesale market operators' (i.e., regional transmission organizations (RTOs) and independent system operators (ISOs)) compensation of demand response bids.<sup>3</sup> In *Federal Energy Regulatory Commission v. Electric Power Supply Association*, the United States Supreme Court concluded that although FERC's regulation of wholesale demand response sales will inevitably influence retail markets, it does not intrude on the States' power to regulate retail sales.<sup>4</sup>

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<sup>1</sup> Similarly, AEMA and CPower disagree with Dakota Electric Association's, Minnesota Power's, and Otter Tail Power's analyses that ARCs may be considered a public utility. Dakota Electric Association Initial Comments at 9-10; Minnesota Power Initial Comments at 3; Otter Tail Power Initial Comments at 6.

<sup>2</sup> See Minn. Stat. §§ 216B.02, .38.

<sup>3</sup> *FERC v. Elec. Power Supply Ass'n*, 136 S. Ct. 760 (2016).

<sup>4</sup> *Id.* at 784 (referring to FERC Order 745 that requires wholesale operators to pay the same price for accepted demand response bids as they do for successful supply bids).

In addition to offering curtailment services, many aggregators offer other energy management services to retail customers, such as energy efficiency and smart building management services. Aggregators provide immense benefits to customers who cannot meet the requirements of retail or wholesale market demand response programs or need technical expertise in order to participate in these programs. Customers are willing to share a portion of program revenues with aggregators for their services in return for facilitating participation and mitigating the compliance burden. Aggregators of demand response allow electricity customers to:

- participate in demand response programs when they cannot individually meet the required kW load reduction threshold, duration of load reduction requirements, or another program requirement;
- participate without the investment to secure experienced staff and technology.
- avoid the risk of program penalties by participating in an aggregated group of customers who share the same goals; and
- avoid paying to buy through a curtailment event they cannot participate in (when the program option is available).

Utility demand response programs without aggregation participation leave customers with little choice. Market competition among aggregators will lead to an increase in demand response participation. Customers with a national or regional footprint (e.g., big box or chain stores, hotels, and restaurants) frequently use the same third-party service provider for aggregation services throughout their business footprint for several reasons such as software integration or contracting for multiple services. Often such customers prefer the automated demand response functionality that they utilize in other regions where they have preprogrammed strategies for their building management systems to respond to load reduction events from their chosen aggregator. These

customers might not participate in a demand response program that does not incorporate aggregators as service providers. One of the many benefits that stem from the aggregator-customer relationship is high participation rates during both test and control events.

Customers may choose to leave an aggregator to sign up with a competing aggregator for better payment terms, absorption of penalties, other products or services offered, or some other reason. For example, one aggregator may help automate a customer’s response to program dispatch directives while another may not. Perhaps a customer simply prefers the data visualization tools offered by one aggregator over another. Competition among aggregators empowers customers with the ability and flexibility to make the best decision to suit their needs. A utility is unable to provide this level of flexibility to its retail customers.

**1. Aggregators Can Reach Untapped Demand Response Resources**

In its initial comments, the Department omitted an important potential source for demand response for ARCs. The Department stated:

The first potential source of DR for ARCs is DR already participating in existing, utility-run DR programs. In this first scenario ARCs attempt to induce DR to switch programs from a utility-run program to the ARC program. The second potential source is to find load not currently participating in utility-run programs. In this second scenario ARCs recruit customers not participating in utility DR programs, organize them, and offer the resulting DR into the wholesale market.<sup>5</sup>

This description of potential demand response customers is simplistic. The Department’s description fails to address the potential source of untapped demand response resources that AEMA sought to reach in Xcel’s proposed Peak Flex Credit Pilot through aggregation.<sup>6</sup>

Aggregators can help customers who are not directly participating in demand response programs,

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<sup>5</sup> Department of Commerce Initial Comments at 19.  
<sup>6</sup> *In re Xcel Energy's Petition for Load Flexibility Pilot Programs and Financial Incentive and In re Commission Investigation to identify Performance Metrics, and Potentially, Incentives for Xcel's Energy's Electric Utility Operation*, MPUC Docket Nos E-002/M-21-101 and E-002/M-17-401, Advanced Energy Management Alliance Initial Comments (June 18, 2021), Advanced Energy Management Alliance Reply Comments (Sept. 9, 2021).

due to program parameters, risk, or price, participate through aggregation. Wholesale and retail market demand response programs are not identical. If a utility's needs for demand response could be met through the wholesale market, the utility would not need to have its own programs. Ideally, the wholesale and retail programs provide complementary services that stack value. As discussed in AEMA and CPower's initial comments, dual participation between wholesale and retail programs can be designed to prevent double counting demand response resources.<sup>7</sup> Dual participation opportunities can help unlock customer potential while maximizing value to the grid. An aggregator can inform a customer about its value to each of these programs. Customers do not all have the same interests, needs, or capabilities. Aggregators can package customers' different abilities and needs to participate in a demand response program where they otherwise could not.

Aggregators provide services that open the market to more customers. For example, customers such as schools,<sup>8</sup> coffee shops, government buildings, small offices, small businesses, and some big box retail stores that cannot meet the minimum requirements for participation in wholesale or retail programs. An aggregator can parse the operational requirements and set up groups of customers that can collectively meet the demand reduction requirements. For example, a large group of coffee shops could be curtailed immediately, but perhaps for no more than an hour. By the end of that hour, some big box stores could curtail lighting, elevators, and other ancillary consumption, but may be limited to an hour or two. At the end of that period, a school district might be able to curtail its lighting and pump motors. Without aggregation, none of these

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<sup>7</sup> AEMA and CPower Initial Comments at 10-11. Concern regarding potential double counting was raised by Great River Energy. Great River Energy Initial Comments at 5.

<sup>8</sup> The North Penn School District in Pennsylvania, the Calvert County Board of Education, and the University of Maryland all participated in *Federal Energy Regulatory Commission v. Electric Power Supply Association*. Brief for Electricity Consumers and Demand Response Providers as Amici Curiae in Support of Petitioners, *FERC v. Elec. Power Supply Ass'n*, 136 S. Ct. 760 (2016) (Nos. 14-840 & 14-841). In their amicus brief, they noted that they were each paid significant sums for their demand response efforts. *Id.* at 12. For example, the North Penn School District earned up to \$110,000 per year, which allowed it to pay for, among other things, educational programs that other schools have had to eliminate. *Id.*

customers could participate in a substantive demand response program. With aggregation, they all benefit from the program, as do nonparticipants due to overall reduced retail costs from robust and reliable demand response participation.

In its order approving Xcel’s Peak Flex Credit Pilot, the Commission found that the pilot presented a “valuable opportunity to test approaches for encouraging commercial customers to participate in strategic demand control.”<sup>9</sup> The pilot’s flexible parameters will also “accommodate customers’ needs and afford them more choice and control over their electric bills.”<sup>10</sup> The Commission concluded that aggregators “could facilitate broader participation and scale of demand-response programs and improve compliance with control events potentially expanding [Xcel’s] demand-response capability and associated system benefits while advancing state energy policy goals.”<sup>11</sup>

## **B. MINNESOTA IS NOT LIVING UP TO ITS DEMAND RESPONSE POTENTIAL**

As the Minnesota Large Industrial Group (MLIG) addressed in its initial comments, the pace of utility demand response program adoption has been slow.<sup>12</sup> The Department made several flawed arguments in its initial comments against the use of aggregators to support the development and growth of demand response in Minnesota. The Department acknowledged that its reliance on U.S. Energy Information Administration (EIA) data for 2021 to measure how demand response programs in Minnesota compared to those nationwide had data quality issues.<sup>13</sup> Despite its reliance on admittedly flawed data, the Department found that Minnesota has the fourth highest level of

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<sup>9</sup> *In re Xcel Energy's Petition for Load Flexibility Pilot Programs and Financial Incentive and In re Commission Investigation to identify Performance Metrics, and Potentially, Incentives for Xcel's Energy's Electric Utility Operation*, MPUC Docket Nos E-002/M-21-101 and E-002/M-17-401, Order Approving Modified Load-Flexibility Pilots and Demonstration Projects, Authorizing Deferred Accounting, and Taking Other Action at 8 (Mar. 15, 2022).

<sup>10</sup> *Id.*

<sup>11</sup> *Id.* at 9.

<sup>12</sup> Minnesota Large Industrial Group Initial Comments at 2-7.

<sup>13</sup> Department of Commerce Initial Comments at 6-7.

potential demand response in the country, which contributed to the Department’s conclusion that Minnesota has “substantial quantities” of available demand response.<sup>14</sup> Generally, the initial comments filed by rate-regulated utilities opined that their demand response offerings are sufficient.

EIA Form 861, which the Department relied on to perform its analysis, identifies “potential peak demand savings” as the “total demand savings that could occur at the time of the system peak hour assuming all demand response is called.”<sup>15</sup> In other words, this form identifies the amount of demand response currently enrolled with the utilities that could be utilized if a curtailment event was called in a peak operating hour. It does not identify the potential demand response that exists within Minnesota (i.e., customers willing and able to participate in demand response). The Department concluded that the total “potential peak demand savings” in Minnesota is 1,884 MW.<sup>16</sup>

FERC undertook a national study in 2009 to compile a ten-year forecast horizon to identify the amount of potential demand response in each state under four scenarios: Business-as-Usual, Expanded Business-as-Usual, Achievable Participation, and Full Participation.<sup>17</sup> In this context, “potential” demand response is the amount of customer load that would reasonably be expected to be available for participation in demand response programs. FERC explained that its study “should be interpreted as the amount of demand response that could potentially be achieved under a variety of assumptions about the types of programs pursued, market acceptance of the programs, and the overall cost-effectiveness of the programs.”<sup>18</sup> According to FERC, by quantifying potential demand

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<sup>14</sup> *Id.* at 1.

<sup>15</sup> U.S. Energy Information Admin., Form EIA-861 Annual Electric Power Industry Report Instructions at 16, [https://www.eia.gov/survey/form/eia\\_861/instructions.pdf](https://www.eia.gov/survey/form/eia_861/instructions.pdf).

<sup>16</sup> Department of Commerce Initial Comments at 8.

<sup>17</sup> FED. ENERGY REGUL. COMM’N, A NATIONAL ASSESSMENT OF DEMAND RESPONSE POTENTIAL STAFF REPORT at 18, 23 (June 2009), [www.ferc.gov/sites/default/files/2020-05/06-09-demand-response\\_1.pdf](http://www.ferc.gov/sites/default/files/2020-05/06-09-demand-response_1.pdf). The report estimates of “potential,” not “projections.” *Id.* at x. The four scenarios illustrate how certain variables, such as dynamic pricing and AMI, can affect demand response potential. *Id.*

<sup>18</sup> *Id.* at 18.

response in each state, its estimates “can serve as a reference for understanding the various pathways for pursuing increased levels of demand response.”<sup>19</sup>

FERC estimated that in the Business-as-Usual scenario, Minnesota has a potential demand response portfolio of 2,056 MW in 2019.<sup>20</sup> The Business-as-Usual scenario reflects the then-current and planned demand response estimates.<sup>21</sup> In contrast to the Department’s conclusion that Minnesota ranks high in terms of potential demand response with its estimate of 1,884 MW of potential demand response, Minnesota utilities still lag behind FERC’s 2009 Business-as-Usual projection of demand response participation expected in 2019. Further, FERC estimated that in its Full Participation scenario, Minnesota could achieve 3,381 MW of demand response by 2019.<sup>22</sup> The Full Participation scenario represents an estimate if all cost-effective demand response options were deployed.<sup>23</sup> It represents what the upper-bound of demand response would be (as estimated in 2009) and assumes advanced metering and meter data management systems would be widely available.<sup>24</sup>

FERC’s study incorporated what were deemed to be cost-effective enabling technologies at the time. FERC did not project any technological advances that could be cost-effective in the future. For example, FERC did not consider technologies such as Wi-Fi-enabled thermostats and other Wi-Fi connected devices that could be controlled remotely. In 2018, approximately 84 percent of Minnesota households had a broadband connection.<sup>25</sup> Abundant Wi-Fi availability and

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<sup>19</sup> *Id.* at 18.

<sup>20</sup> *Id.* at 130.

<sup>21</sup> *Id.* at 23.

<sup>22</sup> *Id.* at 130, 225.

<sup>23</sup> *Id.* at xiv, 24.

<sup>24</sup> *Id.* at 24.

<sup>25</sup> MINNESOTA HOUSE OF REPRESENTATIVES RESEARCH DEPARTMENT, INFORMATION BRIEF: THE INTERNET AND PUBLIC POLICY: COMPUTER AND INTERNET ACCESS IN MINNESOTA at 2 (Aug. 2018), [https://www.house.mn.gov/hrd/pubs/int\\_access.pdf](https://www.house.mn.gov/hrd/pubs/int_access.pdf). Broadband connections are defined as internet provided by cable, DSL, fiber optic, cellular data plans, or satellite internet. *Id.*



connectivity of devices has enabled significantly more demand response than what was envisioned in 2009. It has enabled automated building management, remote control of ventilation, heating, air conditioning, and non-critical business functions. It has also enabled automated residential controls on air conditioning, pool pumps, hot water heaters, and even smaller residential devices such as ice makers and defrosters.

The Department's presentation of the EIA data demonstrates that Minnesota has significantly underachieved what is possible with respect to delivering demand response. Demand response is more important than ever due to fossil fuel plant closures and increased reliance on intermittent resources. Demand response can help smooth the intermittency and serve as a tool to reduce carbon emissions as we transition.

### **C. ARC PARTICIPATION DOES NOT INCREASE COST**

All ratepayers benefit from demand response programs with a robust and reliable demand response portfolio, which aggregators provide. Increased demand response participation can decrease costs for all customers because they have proven that they can be cheaper to deploy during grid stress or high energy consumption than other generation resources.

The Department concluded that allowing ARCs “will either increase the cost of [demand response], raising retail rates, or existing [demand response] will be lost resulting in new capacity being constructed and subsequently retail rates increasing.”<sup>26</sup> Neither scenario is likely. The Department did not (nor any other party) cite any instance in any state or wholesale market where ARCs have increased the cost of existing demand response, caused new capacity to be needed, or increased retail electricity costs.

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<sup>26</sup> Department of Commerce Initial Comments at 1.

AEMA and CPower agree with the Department statement that “ARCs will have the incentive to pursue all cost-effective [demand response].”<sup>27</sup> All cost-effective demand response should be pursued, but utilities have an inherent conflict to expand demand response offerings under traditional cost-of-service ratemaking.

### **1. Retail Demand Response Costs are Unaffected by ARC Participation**

Open ARC participation cannot increase the cost of retail demand response.<sup>28</sup> In retail programs, which are tariffed programs offered by the utilities, the host utility sets the price for demand response in addition to other parameters. Presumably, a state commission would have approved those costs and terms in the utility’s tariff and deemed the program to be cost-effective. An aggregator operating in a tariffed program will seek to obtain as many customers as possible in the “cost-effective” framework. They must work within the constraints, including the costs, that are in the tariff. ARCs have no ability to increase costs within that framework. ARC’s may bring more demand response to the utility than the utility could bring itself, but if the program is cost-effective, every incremental demand response participant will lower costs for all customers, including nonparticipants.

All ratepayers and the utility benefit from a demand response program with a robust and reliable demand response portfolio, which aggregators provide. Demand response is less expensive than incremental peaking plants and can be less expensive to deploy when the grid is constrained or during periods of high energy consumption. Further, allowing aggregators to participate will supplement the utility’s advertising, promotion, and customer education programs because

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<sup>27</sup> *Id.* at 20.

<sup>28</sup> This assumes there is open market aggregation within a utility tariff, and customers could participate directly or via an aggregator. If a demand response program was designed to be managed by an ARC as a vendor, costs could increase, but that would be dependent on the contract terms between the utility.

aggregators will market their services to help customers develop tailored demand response strategies within the utility demand response framework.

In the optimal scenario for customers, there would be a single tariff that allows for direct participation and participation through an aggregator so customers would not need to evaluate two different programs. Its rates and terms applicable to aggregators would be identical to the rates and terms for customers who choose to go directly to the utility for demand response services. Customers would only need to evaluate whether the aggregator can provide services that the utility cannot. If the utilities and aggregators used the same cost-effective tariff, there would be no reason for any concern about aggregators increasing costs.

## **2. Wholesale Market Prices Will be Reduced by ARC Participation in Wholesale Markets**

ARC participation in wholesale markets can do nothing but decrease costs. ARC participation in wholesale markets will increase the available supply of capacity, energy, and ancillary services that can be offered into the market. As a fundamental economic principle, when the supply of a good or service increases, the price of that good or service decreases.

When ARCs offer demand response into the Midcontinent Independent System Operator (MISO) market, it is not possible for an incremental demand response offer to increase the clearing prices of capacity, energy, or ancillary services, unless a lower-priced resource leaves the market. If a lower-priced resource leaves the market and the ARC's offer clears, the ARC resource will be needed as the lowest cost, next available resource. With or without that ARC's resource, the clearing price would have increased. If the ARC resource clears, it will always be lower than the

next resource offering in the market.<sup>29</sup> As the United States Supreme Court explained in *Federal Energy Regulatory Commission v. Electric Power Supply Association*:

*Wholesale* market operators administer the entire program, receiving every demand response bid made. Those operators accept such a bid at the mandated price when (and only when) the bid provides value to the *wholesale* market by balancing supply and demand more "cost-effective[ly]"—*i.e.*, at a lower cost to *wholesale* purchasers—than a bid to generate power. The compensation paid for a successful bid ([Locational Marginal Price]) is whatever the operator's auction has determined is the marginal price of *wholesale* electricity at a particular location and time. And those footing the bill are the same *wholesale* purchasers that have benefited from the lower *wholesale* price demand response participation has produced.<sup>30</sup>

ARC participation in wholesale demand response markets will lower costs in both wholesale and retail markets. The United States Supreme Court concluded, “the natural consequence of wholesale demand response programs is to bring *down* retail rates.”<sup>31</sup>

The Department’s flowchart, Chart 1 regarding ARCs and existing demand response capacity, suggests that ARCs cannot provide value if the utility programs are priced “higher than the market” and ARCs will either increase the cost of demand response or demand response will be lost when utility programs are priced “below market.”<sup>32</sup> This simplistic argument is flawed. Most notably, it conflates wholesale demand response with retail demand response (*i.e.*, a utility program). The wholesale market price for demand response in wholesale markets will be determined by MISO in a competitive bidding process. The concern should be with the utilities’ behavior in pricing demand response in retail markets. If utilities are pricing demand response too high, they are unnecessarily adding costs to consumers. If they are pricing demand response too low, they are undercompensating participating customers. This is not to suggest that the utility

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<sup>29</sup> As a function of the market, accepted demand response bids “are only those offers who acceptance will result in actual savings to wholesale purchasers (along with more reliability service to end users).” *FERC v. Elec. Power Supply Ass’n*, 136 S. Ct. 760, 772 (2016).

<sup>30</sup> *Id.* at 776 (citations omitted).

<sup>31</sup> *Id.* at 778. The Court further stated, “when wholesale prices go down, retail prices tend to follow, because state regulators can, and mostly do, insist that wholesale buyers eventually pass on their savings to consumers.” *Id.*

<sup>32</sup> Department of Commerce Initial Comments at 19-20.

price for demand response should be equal to the MISO clearing price. The utility program likely has different needs and solves for different problems than MISO's demand response programs. The utility programs should be priced accordingly.

The Department suggested that utilities might need to construct new capacity to “replace lost demand response” because ARCs took capacity away from existing utility programs.<sup>33</sup> The Department added that constructing new capacity, such as combustion turbines or energy storage, would increase retail costs.<sup>34</sup> Xcel expressed concern that it could lose important demand response resources that it currently relies on to meet capacity obligations.<sup>35</sup> The utilities will not need to build generation to offset demand response provided by ARCs. Aggregators are required to register customers with MISO. In turn, MISO will ensure the host utility and the Commission have explicit detail about the demand response registered by ARCs. Nothing systematically has changed. MISO will be able to rely on that capacity regardless of which entity is bringing the demand resource to MISO. As discussed in AEMA and CPower's initial comments, ARCs can develop portfolios of demand response resources to meet resource adequacy requirements.<sup>36</sup> Under the utility-ARC PPA model, ARCs can register demand response customers and transfer those credits to the utility's MISO account to satisfy its resource adequacy requirements.

**D. HOST UTILITIES WILL CONTINUE TO HAVE INSIGHT INTO WHOLESALE AGGREGATED DEMAND RESPONSE**

Xcel expressed concern that it will lack sufficient locational granularity of aggregations by ARCs at the distribution level; therefore, Xcel will struggle to accurately forecast the load for planning purposes, especially if the utility's practice is to forecast loads based on historical

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<sup>33</sup> Department of Commerce Initial Comments at 6, 20.

<sup>34</sup> *Id.*

<sup>35</sup> Xcel Energy Initial Comments at 5.

<sup>36</sup> AEMA and CPower Initial Comments at 10, Attachment A at 16.

measurements if ARCs can participate in the wholesale market.<sup>37</sup> Similarly, the Low Income Consumer and Worker Advocates expressed concern that ARCs bidding demand response products into wholesale markets has the potential to undermine the integrated resource planning (IRP) process.<sup>38</sup> ARC registrations of demand resources with MISO will be shared with the Load Serving Entity (LSE) (i.e., the host utility). MISO has a framework in place for robust information sharing that allows the utility to retain demand resource location and responsiveness.

When an ARC submits a customer registration to MISO, MISO sends that information to the Local Balancing Authority (LBA) and the Load Serving Entity (LSE).<sup>39</sup> The LBA and LSE have ten business days to confirm or object to the enrollment.<sup>40</sup> Inaction by the LBA or LSE will not result in delay of the approval of the registration.<sup>41</sup> Additionally, the transmission provider will notify the RERRA following the submission of registration by an ARC and provide detailed information relating to the registration.<sup>42</sup> An RERRA may contest the ARC registration within ten business days prior to approval by the transmission provider, but can still contest the registration at a later time, and may notify the transmission provider if applicable laws or regulation expressly prohibit or do not explicitly permit an end use customer's participation in the transmission provider's market.<sup>43</sup>

ARC registration and information sharing processes are described in MISO tariffs and operating manuals.<sup>44</sup> The LSE and the LBA will have access information such as “the ARC name,

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<sup>37</sup> Xcel Energy Initial Comments at 7.

<sup>38</sup> Low Income Consumer and Worker Advocates Initial Comments at 2.

<sup>39</sup> MISO Demand Response Business Practices Manual (BPM-026-r9) at 28-29 (Oct. 1, 2022).

<sup>40</sup> *Id.* at 29.

<sup>41</sup> *Id.*

<sup>42</sup> MISO, FERC Electric Tariff, Module C, § 38.6 “Aggregators of Retail Customers” (34.0.0) (Sept. 30, 2020).

<sup>43</sup> *Id.*

<sup>44</sup> MISO Demand Response Business Practices Manual (BPM-026-r9) at 28-29 (Oct. 1, 2022); MISO, FERC Electric Tariff, Module C, § 38.6 “Aggregators of Retail Customers” (34.0.0) (Sept. 30, 2020).

resource type, effective date, termination date, LBA name, LSE name(s), CPNode name, EPNodes that comprise the resource, Load Zone CPNode name, end use customer account number(s), meter identification number(s), maximum level of participation, Measurement and Verification methodology, coincident peak dispatch information for use in Peak Load Contribution calculations, and RERRA name.”<sup>45</sup> Due to MISO’s processes, it is disingenuous to suggest that the utility will have any less information about customer participation in ARC-sponsored demand response on the wholesale level than they would have under a utility-sponsored program on the retail level. Further, as described in Attachment A to our initial comments, there are models enabling aggregation that allow the demand resources to be registered with MISO and procured by the utility and utilized in long-term planning processes.

Xcel expressed concern that “[i]ncreased participation of ARCs in MISO may require extremely close coordination between the MISO, ARC, and utilities which does not currently exist.”<sup>46</sup> Xcel is concerned that there could be impacts to the distribution system based on the ARC’s operating plan.<sup>47</sup> Xcel appears to be looking ahead to what will be a much more complex distribution system by 2030 when FERC Order 2222 is expected to be fully implemented. Because something more complicated is coming in a few years is no reason to prohibit demand response in wholesale markets in the near term. Demand response does not cause an injection of power onto the distribution grid, which will happen after FERC Order 2222 is implemented (allowing the injection of other DERs). Planning for, and incorporating, aggregation of demand response now might help the utilities understand how to plan for full implementation of FERC Order 2222. Aggregation of demand response could be viewed as a step toward Order 2222 implementation,

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<sup>45</sup> MISO, FERC Electric Tariff, Module C, § 38.6 “Aggregators of Retail Customers” (34.0.0) (Sept. 30, 2020).

<sup>46</sup> Xcel Energy Initial Comment at 8.

<sup>47</sup> *Id.*

allowing utilities to better understand aggregators actions and business models. Waiting to address issues that may arise would only serve to increase risks to reliability once DER aggregations that inject power are able to participate. Aggregation of demand response in wholesale markets should be fully embraced by the Commission and the Minnesota utilities.

#### **E. AGGREGATORS WORK WITHIN UTILITY STRUCTURES ACROSS THE UNITED STATES**

As addressed in AEMA’s initial comments in Docket No. E002/M-21-101, AEMA has participated in state commission dockets across the country, including states in the MISO region.<sup>48</sup> Aggregators work within utility structures in many states around the country, including in states that have restructured markets and in states that are traditionally regulated with vertically integrated utilities. Moreover, aggregators participate in open aggregation retail tariffs such as those offered by Consolidated Edison Company of New York, Inc. (Con Ed) and other New York utilities.<sup>49</sup>

In its opposition to allowing aggregator participation in utility tariffs in Minnesota, the Department expressed that ARCs have not “indicated a willingness to work within the utility structure” and there would be no reason to consume resources until ARCs express a willingness and “explain what would be required for such a program to be successful.” As noted in AEMA and CPower’s initial comments, AEMA actively participated in Commission Docket Nos. E002/M-21-101 and E002/CI-17-401 to advocate for the inclusion of aggregators in Xcel’s proposed Peak Flex Credit Pilot program in addition to Docket No. E015/M-18-735 regarding

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<sup>48</sup> *In re Xcel Energy's Petition for Load Flexibility Pilot Programs and Financial Incentive and In re Commission Investigation to identify Performance Metrics, and Potentially, Incentives for Xcel's Energy's Electric Utility Operation*, MPUC Docket Nos. E-002/M-21-101 and E-002/M-17-401, Advanced Energy Management Alliance Initial Comments at 9-13 (June 18, 2021).

<sup>49</sup> AEMA’s initial comments addressing Xcel’s proposed Peak Flex Credit Pilot provided a detailed description of Con Ed’s demand response programs allowing aggregator participation under the same tariff as customers participating directly with the utility. *Id.* at 12-13.



Minnesota Power’s proposed demand response tariffs. Clearly, aggregators have expressed interest to work within the utility structure.

The Department supported aggregator participation in Xcel’s Peak Flex Credit Pilot.

“[T]he Department does not believe aggregators should be precluded from providing any of the additional MW of demand response the [Xcel] still needs to procure. The Department would be particularly concerned if the Company ended up choosing the unregulated Energy Infrastructure and Sustainability Program for Business Customers that the Company discussed in Docket No. E,G-002/M-21-329 to deliver the third-party demand response.

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[The Department] [r]ecommends that the Commission allow the participation of third-party aggregators in the Peak Flex Credit as proposed by AEMA. In the event that the Commission opts to not allow third-party aggregators to participate in this Pilot project, it should [sic] require Xcel to work with AEMA to develop a pilot demand response program for third party aggregators to be filed by January 15, 2022.<sup>50</sup>

#### **F. RESIDENTIAL CUSTOMERS BENEFIT FROM AGGREGATION SERVICES**

In its initial comments, the Low Income Consumer and Worker Advocates, expressed concern that residential customers might not understand the terms of the agreement with an aggregator providing aggregation services, including penalties and automatic suspension of electric service.<sup>51</sup>

As explained in our initial comments, the end-use customer is a seller of demand response. An aggregator acts as a facilitator of a sale of capacity, energy, or ancillary services from the retail customer to the utility or RTO/ISO. When a customer agrees to sell its curtailment of electric service to an aggregator, the aggregator pays the customer. If the customer fails to reduce load when called upon, the customer does not get paid. Due to their ability to aggregate customers into

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<sup>50</sup> *In re Xcel Energy's Petition for Load Flexibility Pilot Programs and Financial Incentive and In re Commission Investigation to identify Performance Metrics, and Potentially, Incentives for Xcel's Energy's Electric Utility Operation*, MPUC Docket Nos E-002/M-21-101 and E-002/M-17-401, Department of Commerce Reply Comments at 14, 26 (Sept. 9, 2021).

<sup>51</sup> Low Income Consumer and Worker Advocates Initial Comments at 1.

a portfolio, aggregators can balance portfolio performance to reduce the risk of penalties being assessed. Any over-performance or under-performance by aggregated customers would be sorted out by the aggregator and payments would be issued based on the commercial terms agreed to by the aggregator and the customer. Typically, aggregators absorb penalties when its aggregated portfolio scenario triggers a penalty either in a utility program or on the wholesale market.

The Low Income Consumer and Worker Advocates suggested that demand response products include “the automatic suspension of electricity service to retail customers during certain times.”<sup>52</sup> This is false. Residential demand response targets individual devices that are consuming electricity such as air conditioners, hot water heaters, pool pumps, EV charging, and potentially smaller appliances such as ice makers and defrosters in freezers. AEMA and CPower are not aware of any demand response program anywhere that has ever allowed a curtailment of electricity service at a property. That would be preposterous and likely violate state laws.

The Low Income Consumer and Worker Advocates expressed concerned that individual residential customers are likely unaware of the appropriate value for a demand response program. They suggest that because aggregators have no capped rate of return, individual customers may miss out on a better valued demand response option with the regulated utility.<sup>53</sup> Competition typically works out in the best interest of consumers. Consumers can compare aggregators to find the best value to fit their needs. It is possible that customers might be paid different rates to curtail their electric use. Aggregators might be offering different terms from one another. For example, one aggregator might provide a customer with an option to opt-out of a curtailment and the other might not, which would result in different rates. Either way, customers are better off than they would be if they did not participate in demand response. The Commission should focus on what is

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<sup>52</sup> *Id.*

<sup>53</sup> Low Income Consumer and Worker Advocates Initial Comments at 2.

most important to customers, which is the ability to manage electricity costs. Aggregators offer that ability to manage costs through demand response participation to the largest possible group of customers.

#### **G. RECENT COMMISSION ACTION IN MICHIGAN**

As Voltus pointed out in its initial comments, Michigan recently reversed its ban on ARC participation in wholesale markets for aggregated loads greater than 1 MW.<sup>54</sup> Voltus also addressed other state commission actions within MISO’s footprint. Several entities, including aggregators, sought clarification from the Michigan Public Service Commission (MPSC) on what qualifies to meet the 1 MW threshold.<sup>55</sup> In response, MPSC clarified that the 1 MW size threshold established in its order “may be achieved by a single corporate customer across multiple sites” and that this limitation “shall be defined as a 1 MW demand minimum threshold that may be met with 1 MW of the highest annual customer non-coincident hourly demand in any of the previous three years or, if a three-year history is unavailable, by a reasonable estimate by the utility.”<sup>56</sup> This clarification effectively delays the opportunity for residential and small business customers to participate in wholesale markets, however, the MPSC intends work with stakeholders to develop consumer protections for resources smaller than 1 MW and may revisit the ban on aggregation for bundled retail loads smaller than 1 MW as it continues to gain experience with ARCs.<sup>57</sup>

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<sup>54</sup> Voltus Initial Comments at 3; *In re Commission’s Own Motion, to Address Outstanding Issues Regarding Demand Response Aggregation for Alternative Electric Supplier Load*, Michigan Public Service Commission Case No. U-20348, Order at 49 (Dec. 21, 2022).

<sup>55</sup> *In re Commission’s Own Motion, to Address Outstanding Issues Regarding Demand Response Aggregation for Alternative Electric Supplier Load*, Michigan Public Service Commission Case No. U-20348, Order at 4-5 (Feb. 23, 2023).

<sup>56</sup> *Id.* at 23.

<sup>57</sup> *In re Commission’s Own Motion, to Address Outstanding Issues Regarding Demand Response Aggregation for Alternative Electric Supplier Load*, Michigan Public Service Commission Case No. U-20348, Order at 34 (Dec. 21, 2022).

AEMA and CPower support the approach in Michigan, but do not believe that delaying access to demand response opportunities for residential and small business customers is in the public interest. Demand response has proven to lower costs for participants and nonparticipants. It has proven to enhance reliability and it will be able to help smooth intermittency of renewable resources in a carbon-free manner. Smaller customers should not be prevented from enjoying the same benefits that larger customers will enjoy.

#### **H. VERIFYING OR CERTIFYING ARCS AND PROTECTING CONSUMERS**

AEMA and CPower do not oppose the Department's recommendation that the Commission take no action regarding verifying or certifying aggregators at this time.<sup>58</sup> Nevertheless, AEMA and CPower oppose the suggestion by the Department that each utility could have its own certification process.<sup>59</sup> The potential for varying degrees of requirements could keep viable ARCs out of certain markets in Minnesota, for no reason other than different qualification requirements.

In its comments filed in Docket No. E002/M-21-101, AEMA described processes in other states that may be helpful to this record.<sup>60</sup> Because Xcel's Peak Flex Credit Pilot was the first pilot program to allow aggregator participation in the state, AEMA supported incorporating protections within the tariff.

AEMA and CPower do not oppose the Low Income Consumer and Worker Advocates suggestion that the Commission require ongoing filing requirements and compliance filings, however, we do not agree it is necessary.<sup>61</sup> To the extent that Minnesota adopts a certification

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<sup>58</sup> Department of Commerce Initial Comments at 22.

<sup>59</sup> *Id.*

<sup>60</sup> *In re Xcel Energy's Petition for Load Flexibility Pilot Programs and Financial Incentive and In re Commission Investigation to identify Performance Metrics, and Potentially, Incentives for Xcel's Energy's Electric Utility Operation*, MPUC Docket Nos E-002/M-21-101 and E-002/M-17-401, Advanced Energy Management Alliance Initial Comments at 7-8 (June 18, 2021), Advanced Energy Management Alliance Reply Comments at 9-10 (Sept. 9, 2021).

<sup>61</sup> Low Income Consumer and Worker Advocates Initial Comments at 3.

requirement, it should be a statewide certification process based on business credentials and technical competence. It should be a fact-based review of credentials and not a subjective review.

The Low Income Consumer and Worker Advocates request that ARCs should be required to make their product available to all customers on equal terms but this defeats the purpose of aggregation.<sup>62</sup> If all customers must be treated equally, none of the customers described in the hypothetical aggregation (in this reply comment and AEMA and CPower's initial comments) could participate because none would individually be able to meet the requirements of the demand response program. AEMA and CPower agree with the Department that existing laws are sufficient to protect transactions between an end-use customer and the aggregator.<sup>63</sup>

### **III. CONCLUSION**

AEMA and CPower respectfully recommend that the Commission permit aggregators of retail customer to bid demand response into wholesale markets and require rate-regulated electric utilities to create tariffs allowing third-party aggregators to participate in utility demand response programs. Additionally, AEMA and CPower supports MLIG's suggestion that each utility file tariff language allowing aggregator participation in this docket within 60 days of the Commission's final order.<sup>64</sup> This would allow stakeholders an opportunity to comment on program design.

AEMA and CPower is not opposed to the Commission establishing a verification or certification process for ARCs for demand response or distributed energy resources before they are permitted to operate, however, we support a uniform process for verification or certification across Minnesota. AEMA is not opposed to additional consumer protections, however, existing consumer protections are in place to prevent harm.

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<sup>62</sup> *Id.*

<sup>63</sup> Department of Commerce Initial Comments at 22-23.

<sup>64</sup> Minnesota Large Industrial Group Initial Comments at 9.

AEMA and CPower appreciate that the Commission is considering allowing third-party aggregation of demand response on the wholesale and retail level. Aggregator participation in the wholesale and retail markets will increase demand response participation and lower costs for everyone.

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Respectfully submitted,

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