BEFORE THE
PUBLIC SERVICE COMMISSION OF WISCONSIN

Investigation on the Commission's Own Motion to Review Aggregation of Retail Customers to Form Demand Response Load Reduction Resources	Docket No. 5-EI-163

Comments of the R Street Institute

The R Street Institute (R Street) submits these comments in response to the Notice of Investigation and Request for Comments, issued by the Wisconsin Public Service Commission (Commission or PSC) on September 5, 2024.[1] Specifically, the Notice identifies this comment period to "help determine the Commission's priority actions related to the aggregation of retail customer resources for the purpose of bidding their demand response load reductions into wholesale markets."[2] The Commission seeks comments on five questions related to whether the Commission should allow third-party aggregators and how, if at all, the Commission should allow them to operate in Wisconsin. R Street appreciates the Commission initiating this conversation on whether to allow aggregators of retail customers (ARCs) to participate in Wisconsin and believes this Notice will provide much-needed information.

Introduction

On October 17, 2008, the Federal Energy Regulatory Commission (FERC) issued Order No. 719.[3] That order directed Regional Transmission Organizations (RTOs) to institute reforms to "accept bids from demand response resources in their markets for certain ancillary services, on a basis comparable to other resources."[4] In particular, FERC sought to remove barriers to participation in RTO tariffs for demand response. As FERC stated in Order No. 719, "enabling demand-side resources, as well as supply-side resources, improves economic operation of electric power markets by aligning prices more closely with the value customers place on electric power."[5] However, Order No. 719 noted that while RTOs are to allow a bid from an ARC, such participation by the ARC may be limited if "the laws or regulations of the relevant electric retail regulatory authority do not permit the customers aggregated in the bid to

---

[1] *Investigation on the Commission's Own Motion to Review Aggregation of Retail Customers to Form Demand Response Load Reduction Resources*, Notice of Investigation and Request for Comments, Docket No. 5-EI-163 (Sept. 5, 2024) (Notice).
[2] *Id.* at 1.
[3] *Wholesale Competition in Regions with Organized Electric Markets*, Order No. 719, 125 FERC ¶ 61,071 (2008), *order on reh'g*, Order No. 719-A, 128 FERC ¶ 61,059 (2009), *order on reh'g*, Order No. 719-B, 129 FERC ¶ 61,252 (2009).
[4] Order No. 719 at P 15.
[5] *Id.* at P 16.

participate."[6] FERC Order No. 719-A further notes that "we leave it to the appropriate state or local authorities to set and enforce their own requirements" for ARC participation.[7]

Like many states in the Midcontinent Independent System Operator (MISO) footprint, the Commission issued an order prohibiting ARCs from aggregating Wisconsin customers.[8] This order, while expressing its "temporary" nature, remained in effect until this year when the Wisconsin Court of Appeals determined it was "invalid and therefore unenforceable."[9] In response to this action, the Commission opened this proceeding to "examine the potential operation of Aggregators of Retail Customers in Wisconsin."[10] The Commission seeks comments on five questions to inform potential actions it may take regarding ARCs. Specifically, the Commission asked:

1. Should the Commission take any temporary measures related to the aggregation of retail customers for the purpose of bidding demand response load reductions into wholesale markets while this investigation is pending? If so, please describe what temporary measure(s) you think the Commission should take, the Commission's authority to take such measures, and explain why such measures should be taken.
2. What are the benefits and downsides to authorizing aggregation of retail customers in Wisconsin for the purpose of bidding demand response load reductions into wholesale markets?
3. How should potential aggregation of retail customers be structured? How should aggregators interact with utility retail programs (i.e. data sharing, enrollment, compensation, verification, accounting)? In your response, please provide examples of successful programs in other states.
4. How would aggregated retail customers be compensated for their demand response load reductions and how would these compensation arrangements impact non-participating customers?
5. What steps, if any, should the Commission take to ensure that any new Commission processes related to aggregations of retail customers for demand response align Wisconsin law and with Midcontinent Independent System Operator (MISO) processes, including MISO's compliance with FERC Order 2222 and existing MISO demand response resources and/or load-modifying resources?[11]

R Street appreciates the opportunity to provide our responses to these questions below.

---

[6] *Id.* at P 155.
[7] Order No. 719-A at P 54.
[8] *Investigation to Develop and Analyze Alternative Electric and Natural Gas Rate Design and Load Management Options which have the Potential to Reduce Emissions of Greenhouse Gases*, Order Temporarily Prohibiting Operation of Aggregators of Retail Customers, Docket No. 5-UI-116 (Oct. 15, 2009).
[9] *Midwest Renewable Energy Association v. Public Service Commission of Wisconsin*, 2024 WI App 34, Case No. 2022AP968, at slip. op. 10 (May 31, 2024).
[10] Notice at 1.
[11] *Id.* at 1-2.

About the R Street Institute

The R Street Institute (R Street) is a nonprofit, nonpartisan public policy research organization. Our mission is to engage in policy research and outreach to promote free markets and limited, effective government. We favor regulation that is transparent and applied equitably, as well as systems that rely on price signals rather than central planning. At the same time, we recognize that natural monopolies and externalities are real concerns that governments must address. We offer research and analysis that advance the goals of a more market-oriented society and an effective, limited government, with the full realization that progress takes time.

As one of the preeminent free-market entities in the United States, R Street has a unique perspective on the issues raised in this proceeding regarding the growth and development of ARCs and demand response participation in wholesale markets, ensuring transparency in wholesale market structures, reducing barriers to entry in wholesale markets, and seeking to lower costs via market-based solutions.

Contact Information

Correspondence and communications regarding this filing should be addressed to the undersigned as follows:

Chris Villarreal
Associate Fellow, Energy and Environmental Policy
R Street Institute
9492 Olympia Drive
Eden Prairie, MN 55347
cvillarreal@rstreet.org

Kent Chandler
Resident Senior Fellow, Energy and Environmental Policy
R Street Institute
1411 K Street NW, Ste. 900
Washington, DC 20005
kchandler@rstreet.org

Comments

R Street thanks the Commission for seeking input on these important procedural considerations. R Street believes that this is an opportune time for the Commission to have this discussion regarding the ability of ARCs to participate in Wisconsin. R Street recommends that the Commission continue this proceeding to develop appropriate requirements and processes to allow ARCs to participate in Wisconsin, as discussed further below.

R Street would first like to comment on the significant changes in the electricity system since the Commission first issued its temporary prohibition on ARCs. This includes additional action before the FERC directing RTOs to allow distributed energy resource aggregators (DERAs) to

participate in wholesale markets.[12] After FERC issued Order No. 719, it issued Order No. 745, which provided additional guidance and direction regarding the use of demand response in organized markets, and which was upheld by the U.S. Supreme Court and solidified FERC's authority regarding the role of demand response in organized markets.[13] FERC also issued Order No. 2222, which directs RTOs to allow for the aggregation of distributed energy resources (DERs), which is broader than just demand response. Indeed, DER can include demand response, energy efficiency, energy storage, electric vehicles, and solar.[14] Finally, FERC has taken steps to reconsider the initial decision in Order No. 719 that let states opt out of allowing ARCs to provide demand response services to operate in their states.[15]

This opt-out creates challenges for implementing Order No. 2222, as the opt-out only applies to demand response services. This means that an ARC that is allowed to operate pursuant to Order No. 2222 by aggregating energy efficiency, storage, or any other wholesale service cannot include demand response. FERC sought to address this confusion in Order No. 2222-A by allowing demand response to be included in heterogeneous aggregations.[16] According to FERC, one of the goals of Order No. 2222 is to "break down barriers to competition."[17] While FERC subsequently withdrew the direction to allow demand response to be part of heterogeneous aggregations in Order No. 2222-B, it did not explicitly reject its determination on the value of demand response being included in heterogeneous aggregations; rather, FERC decided to open a new proceeding to consider whether the demand response opt-out that was granted in Order No. 719 should be maintained.[18] To minimize this confusion, R Street believes that the Commission should allow customers with demand greater than 100 kW (individually or in aggregate) to work with ARCs and participate in organized markets as well as develop rules and processes for ARC registration and data access to allow ARCs to participate in organized markets more fully. This would allow ARCs to develop aggregations that include demand response, both on a stand-alone basis and as part of a heterogeneous aggregation. Such action is allowed under Order No. 719 and would fulfill the overarching goals of both Order No. 745 and Order No. 2222—to enhance competition in organized markets.

---

[12] *Participation of Distributed Energy Res. Aggregations in Mkts. Operated by Reg'l Transmission Orgs. & Indepe. Sys. Operators*, Order No. 2222, 172 FERC ¶ 61,247 (2020), *order on reh'g*, Order No. 2222-A, 174 FERC ¶ 61,197, *order on reh'g*, Order No. 2222-B, 175 FERC ¶ 61,227 (2021).

[13] *Demand Response Compensation in Organized Wholesale Energy Mkts.*, Order No. 745, 134 FERC ¶ 61,187 (2011), *order on reh'g & clarification*, Order No. 745-A, 137 FERC ¶ 61,215 (2011), *reh'g denied*, Order No. 745-B, 138 FERC ¶ 61,148 (2012), *vacated sub nom. Elec. Power Supply Ass'n v. FERC*, 753 F.3d 216 (D.C. Cir. 2014), *rev'd & remanded sub nom. Elec. Power Supply Ass'n v. FERC,* 136 S. Ct. 760 (2016).

[14] *See*, *e.g.*, Distributed Energy Resources Rate Design and Compensation: A Manual Prepared by the NARUC Staff Subcommittee on Rate Design, NARUC at 45 (November 2016). https://pubs.naruc.org/pub/19FDF48B-AA57-5160-DBA1-BE2E9C2F7EA0

[15] *Participation of Aggregators of Retail Demand Response Customers in Markets Operated by Regional Transmission Organizations and Independent System Operators*, 174 FERC ¶ 61,198 (March 18, 2021).

[16] Order No. 2222-A at PP 22, 28.

[17] *Id.* at P 23.

[18] Order No. 2222-B at P 28.

1. Should the Commission take any temporary measures related to the aggregation of retail customers for the purpose of bidding demand response load reductions into wholesale markets while this investigation is pending? If so, please describe what temporary measure(s) you think the Commission should take, the Commission's authority to take such measures, and explain why such measures should be taken.

R Street proposes that the Commission take a two-step approach to determining appropriate measures to address ARCs. First, R Street suggests that the Commission allow ARCs to operate in relevant utility service territories immediately but limit such participation to customers with demand of 100 kw or higher. This demand can be either at an individual location or aggregated by a customer inside a utility's service territory. These customers are sophisticated enough to understand the risks of participating with an ARC. Allowing this threshold to be aggregated also allows certain commercial customers with multiple locations across a utility's service territory to participate in MISO markets. Note that R Street suggests limiting such aggregation only to individual utility service territories. In other words, if Retailer A operates across Wisconsin and seeks to sign up with an ARC, its aggregation that participates in MISO markets can be done only on a utility service territory basis, as long as it reaches 100 kW. The 100 kW minimum is consistent with FERC Order No. 2222.[19] Such a threshold is also consistent with recent actions by the Missouri Public Service Commission in its order allowing ARCs to participate in Missouri.[20]

The second step R Street suggests is to continue this proceeding to develop registration requirements for ARCs and processes to enable the sharing of customer usage information with customer-approved third parties, including ARCs. As further detailed in response to Question 3, R Street encourages the Commission to not limit opportunities only to commercial and industrial customers that reach the 100 kW threshold; indeed, all customers of the regulated utilities should have the opportunity to participate. By enabling all customers to participate and creating appropriate registration requirements and data access processes, the Commission can set the stage for broader implementation of FERC Order No. 2222.

By taking this two-step approach, the Commission can allow large customers who have the expertise to work with ARCs and who understand market dynamics to develop appropriate products to participate in MISO markets. This also allows the Commission, ARCs, utilities, and consumers to gain experience in the interactions between customers, ARCs, utilities, and MISO in advance of Order No. 2222 implementation. This can be treated as an interim, limited experience while the Commission works on a registration process and a method by which customer usage information can be transferred to a customer-authorized third party.

---

[19] *Participation of Distributed Energy Resource Aggregations in Markets Operated by Regional Transmission Organizations and Independent System Operators*, Order No. 2222, 172 FERC ¶ 61,247 at P 171 (2020).

[20] *In the Matter of the Establishment of a Working Case Regarding FERC Order 2222 Regarding Participation of Distributed Energy Resource Aggregators in Markets Operated by Regional Transmission Organizations and Independent System Operators*, Order Partially Modifying the Commission's 2010 Order Regarding ARCs, File No. EW-2021-0267 (Oct. 12, 2023).

R Street is not suggesting, however, that the Commission regulate ARCs as if they are a public utility. Instead, R Street's recommendation, as more fully described in response to Question 3 is that the Commission has authority over the utilities it regulates, and therefore has authority to review and enforce utility tariffs. As such, any such requirements and procedures to enable ARCs can be detailed, implemented, and enforced through a regulated utility's tariff, which is under the jurisdiction of this Commission.

2. What are the benefits and downsides to authorizing aggregation of retail customers in Wisconsin for the purpose of bidding demand response load reductions into wholesale markets?

As noted above, participation in organized markets by aggregators has been allowed since 2009, with the passage of Order No. 719. Customers have missed out on opportunities to participate in those markets for nearly 15 years. Since then, there has been a significant amount of growth in technology available to customers, such as smart thermostats, electric vehicles, and the installation of advanced metering infrastructure (AMI). Indeed, traditional, staid utility demand response programs, where they are available only during system emergencies, provides no opportunities for customers to be more active and engaged, and limits additional tools that can be used by MISO on a daily basis. This was precisely FERC's goal in Order Nos. 719, 745, and 2222: to encourage demand to participate as a resource and to be responsive, rather than to act passively with no ability to assist in the reliability of the grid. New technologies allow for more resources and services to participate, which then helps mitigate potential reliability events and can also lower costs through the use of demand response rather than a power plant. As demand response (and DER more broadly) grows in participation and utilization, this can also result in lower costs in the future as resource needs can be met by aggregated resources rather than by utility-owned power plants.

The Commission's goal in determining how to proceed should be based on whether customers benefit, not whether the utilities benefit. If ARCs can provide the same or similar demand response products to customers at the same or similar cost while providing benefits, R Street would argue that that service should be competitive. In order to determine their ability to compete and customers' willingness to participate in other demand response products, ARCs should be allowed to offer such products and services to Wisconsin customers, aggregate their response, and bid that demand response into MISO markets. The Commission should also reject utility concerns about whether ARC demand response products will be cost-effective, as FERC Order No. 745 provides that demand response in wholesale markets will only be compensated if it passes a net benefits test.[21] In other words, if the demand response product passes the MISO net benefits test, it would be compensated for its services and would have provided customer benefits. The Commission should not, therefore, allow the utility to have a monopoly on customer benefits.

[21] Order No. 745 at P 78.

Furthermore, removing the prohibition on ARCs would allow more demand response to participate directly in MISO markets, which would have the benefit of lowering overall market costs. An ARC has an incentive to maximize customer benefits so they can sign up different types of customers (including by aggregating smaller customers) and then create products that utilize value stacking, which allows customers to participate in capacity, energy, and ancillary services markets to maximize value to the market and customers. This value stacking contrasts with existing utility demand response programs, which are typically limited to emergency, interruptible products. Since ARCs directly participate in MISO markets, MISO will have visibility into the demand response products offered into its markets. Existing MISO processes address the risk of a utility over-procuring resources, as MISO would add it back into the utility's planning reserve margin requirement. Essentially, if a customer leaves a utility demand response capacity product and signs up for an ARC capacity product, that demand response is counted the same way at MISO, and that information is then provided back to the utility in reduced capacity obligations, just as if the utility did it themselves. Allowing ARCs to participate would also permit customers to participate in more than one type of demand response (or distributed energy resources) product. As it is, because the utilities typically utilize capacity products only, there are few to no opportunities for customers to provide demand response, or other products, in MISO energy and ancillary services markets.

3. How should potential aggregation of retail customers be structured? How should aggregators interact with utility retail programs (i.e. data sharing, enrollment, compensation, verification, accounting)? In your response, please provide examples of successful programs in other states.

To have a well-functioning and trusted marketplace for ARCs to participate within Wisconsin, R Street believes that the Commission should adopt such requirements, processes, and tariffs as necessary to enable ARC participation. R Street sees the role of ARC registration and the development of rules and tariffs to provide certainty to ARCs, utilities, the Commission, and customers regarding the operation of ARCs. Furthermore, R Street notes that any rule or tariff that is adopted should be applied in the same manner for each utility under Commission authority. Such conformity is vital to ensuring that aggregators can operate in Wisconsin with one set of rules rather than multiple utility-specific requirements. This consistency will reduce overhead and customer-acquisition costs for the ARCs and will ensure that individual utility practices do not become a barrier to entry.

As a starting point, R Street suggests that the Commission look to the rules and tariffs adopted by the California Public Utilities Commission (CPUC) related to demand response aggregators that operate in California.[22] For an ARC (or a demand response provider (DRP)), as they are defined in California) to participate in California, an aggregator must be registered with the

[22] *Order Instituting Rulemaking regarding policies and protocols for demand response load impact estimates, cost-effectiveness methodologies, megawatt goals and alignment with California Independent System Operator Market Design Protocols*, D.12-11-025, California Public Utilities Commission (Dec. 4, 2012). https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M037/K494/37494080.PDF; *See also*, PG&E Electric Rule No. 24. https://www.pge.com/tariffs/assets/pdf/tariffbook/ELEC_RULES_24.pdf. All references to the California rule will be to PG&E Electric Rule No. 24 unless otherwise identified.

CPUC, along with the California Independent System Operator (CAISO). For the purposes of these comments, R Street will focus on the state regulatory requirements adopted by the CPUC.

Accordingly, the requirements adopted by the CPUC include:

1. A signed DRP registration form;
2. An application fee of $100 via certified check;
3. A signed utility-DRP service agreement for each utility territory that the DRP intends to do business in; and
4. A performance bond if the aggregator intends to serve residential or small commercial customers (of less than 20 kW peak load). The performance bond amount is based on the number of customers according to a formula in each of the utility's rules. The minimum performance bond amount is $25,000.[23]

By requiring such information, the Commission would be able to identify authorized ARCs; have contact information for all authorized ARCs; ensure that the ARCs agree to abide by the adopted policies and requirements of the Commission; and provide additional protection for ARCs that work with residential and small commercial customers.[24]

Furthermore, by adopting requirements as found in PG&E Electric Rule No. 24, the Commission would provide certainty to ARCs and the utilities regarding the rights, roles, and responsibilities of each organization. Such requirements include:

- A common set of definitions;
- Timelines for approval and communications between the ARC and the utility;
- Participation requirements for customers to minimize risk of dual participation in the same products;
- The availability of customer energy usage data;
- How to establish aggregation service;
- Any costs that need to be paid in the provision of certain services (such as metering);
- The process for a customer to discontinue participation in either a utility demand response program or an aggregator's program; and
- A dispute-resolution process.

R Street is concerned that if these requirements, roles, and responsibilities are not detailed in advance, the Commission may find itself needing to litigate these issues individually and as they occur on a utility-by-utility basis, which would not be beneficial to customers, ARCs, utilities, or the Commission. Rather, by comprehensively addressing these issues in advance and in one

[23] California Public Utilities Commission, "DRP Registration Information," State of California, last accessed Oct. 21, 2024. https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/electric-costs/demand-response-dr/drp-registration-information. Examples of needed forms can be found at the same link.

[24] *See*, *e.g.*, the list of registered aggregators with the CPUC: https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/electric-costs/demand-response-dr/registered-demand-response-providers-drps-aggregators-and-faq.

document, the Commission can detail the roles of the ARCs and utilities and set expectations for how aggregation will occur.

Finally, R Street encourages the Commission to ensure that any action related to the development of data access and privacy policies be consistent across each regulated utility. This would include the adoption of Green Button Connect My Data and ensuring that such implementation is done in compliance with the underlying standard via certification by an appropriate entity. A significant barrier to enabling aggregators is when each utility in a given jurisdiction has different rules, policies, and requirements. In other words, if an aggregator wants to participate in Wisconsin, but each utility has different policies related to accessing customer data, the means by which data is shared with an authorized third party, or is otherwise not in compliance with the underlying standard, the greater the cost to the aggregator and the more difficult it is for the customer to participate.

4. How would aggregated retail customers be compensated for their demand response load reductions and how would these compensation arrangements impact non-participating customers?

R Street's position is that the first part of this question is beyond the scope of the Commission's authority. To the extent that a customer agrees to a contract with an entity not under the jurisdiction of the Commission, that decision is entirely with the customer. Furthermore, such compensation for any aggregated demand response that is dispatched by MISO would be subject to MISO rules and regulations. Similarly, the effect of any MISO compensation to an ARC and its customers would be subject to MISO rules and regulations regarding participation in MISO markets, including FERC Order No. 745.

However, to the extent that the Commission is worried about ARCs cherry-picking existing utility demand response programs or impacts of demand response participating in MISO markets through an ARC, R Street offers the following comments.

First, the Commission should investigate how often existing demand response products are used by the utilities. For example, data requests from the staff of the Minnesota Public Utilities Commission found that between the years 2015 and 2019, Xcel called its demand response programs once in response to a grid need.[25] To the extent that Wisconsin's utilities are similarly situated, this means that despite existing utility demand response programs, they are under-utilized compared to the benefits they could be providing if they were used more often or if customers had more options in which to participate.

[25] *In the Matter of a Commission Investigation to Identify Performance Metrics, and Potentially, Incentives for Xcel Energy's Electric Utility Operation*, Xcel Response to Staff Information Request No. 3, Docket No. E002/CI-17-401 (Jan. 28, 2020). https://www.edockets.state.mn.us/edockets/searchDocuments.do?method=showPoup&documentId={E020EE6F-0000-CC1A-AE78-982A9CCFACC4}&documentTitle=20201-159731-01

Second, the Commission should consider the needs of customers. FERC has previously found that "active participation by customers in the form of demand response in organized wholesale markets helps to increase competition in those markets."[26] FERC identified three benefits of demand response participation in organized markets:

- Produce just and reasonable prices;
- Mitigate generator market power; and,
- Support system reliability and address resource adequacy.[27]

By not allowing ARCs to sign up customers in Wisconsin, Wisconsin customers have lost the opportunity to save money both individually and more broadly through unavoided wholesale market prices.

Lastly, to the extent that utilities are concerned about the effects of ARCs on their load forecasting efforts, R Street notes that MISO already has processes in place to close that information loop. The Commission should recognize that utility arguments are also related to the effect that reduction in demand (be it peak or overall) will have on the construction of utility-owned power plants. The Commission should take care to review utility arguments to the extent that they are more about avoiding capital investments than they are about concerns regarding reliability or costs; indeed, better utilization of demand response may avoid or defer the need for capital investments, which would benefit customers.

5. What steps, if any, should the Commission take to ensure that any new Commission processes related to aggregations of retail customers for demand response align Wisconsin law and with Midcontinent Independent System Operator (MISO) processes, including MISO's compliance with FERC Order 2222 and existing MISO demand response resources and/or load-modifying resources?

R Street's perspective is that the Commission will have to do something to enable DER aggregation activities in response to Order No. 2222. Therefore, it makes sense for the Commission to start the process for ARC participation in Wisconsin as a foundation for Order No. 2222 implementation. While the Commission may be encouraged to wait until final determinations are made on whether FERC will keep the demand response opt-out, the market modifications that are still needed at MISO, or whether FERC will accept or modify MISO's Order No. 2222 compliance filing, it still remains that Order Nos. 719 and 745 are in effect. In both circumstances—demand response and DER, more broadly—certain decisions and processes will need to be developed. R Street has identified ARC registration and data access as two of those steps, but there may be others.

[26] Order No. 745 at P 9.
[27] *Id.* at P 10.

Conclusion

R Street thanks the Commission for the opportunity to provide these comments in response to its Notice.

Respectfully submitted,

/s/ Christopher Villarreal
Christopher Villarreal
Non-Resident Energy Policy Fellow

The R Street Institute
1411 K Street NW, Ste. 900
Washington, D.C. 20005
415-680-4224
cvillarreal@rstreet.org

October 24, 2024