UNITED STATES OF AMERICA

BEFORE THE

FEDERAL ENERGY REGULATORY COMMISSION

Participation of Aggregators of Retail Demand Response Customers in Markets Operated by Regional Transmission Organizations and Independent System Operators	))))	RM21-14-000

Comments of the R Street Institute

Pursuant to Notice of Inquiry (NOI) issued on March 18, 2021 by the Federal Energy Regulatory Commission (FERC or Commission), the R Street Institute (R Street) hereby submits comments in response to the questions raised in the NOI.[1] This NOI seeks comments on issues related to the ability of states to opt-out of allowing aggregators of retail customers (ARC), also known as demand response aggregators, to operate in their respective states and directly participate in Regional Transmission Organization/Independent System Operator (RTO/ISO) markets, as originally determined by FERC Orders 719 and 719-A.[2]

Demand response (DR) is an important tool for utilities, states, and aggregators, and will be increasingly important as wholesale markets seek new and more flexible resources in response to growth in renewables and distributed energy resources (DER). R Street submits these comments in support of FERC's consideration on whether the state opt-out for ARCs remains a reasonable standard as technology, market products and innovation, and other advances in technology have rendered a state opt-out as a barrier to innovation and greater utilization of demand response.

I. Introduction

A. Background

In FERC Orders 719 and 719-A, FERC directed RTO/ISO markets develop rules to allow ARCs that aggregate retail customers to be allowed to directly participate in wholesale markets, subject to certain limitations, including the ability of a state or local authority to opt-out of allowing ARCs to participate in their region.[3] By allowing ARCs to aggregate retail customers

[1] *Participation of Aggregators of Retail Demand Response Customers in Markets Operated by Regional Transmission Organizations and Independent System Operators*, 86 FR 15,934 (Mar. 25, 2021), 174 FERC ¶ 61,198 (2021). The due date for submission of comments was extended by Notice issued on June 17, 2021.
[2] *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, *order on reh'g*, Order No. 719-B, 129 FERC ¶ 61,252 (2009).
[3] NOI at P 3.

and directly participate in RTO/ISO markets, FERC sought to reduce barriers to entry for new market products and services, increase competition, lower customer costs, enhance reliability, and generally increase the amount of DR in wholesale markets.[4] Since the finalization of Order 719 in 2008, FERC identified a series of FERC orders and policy changes that have advanced FERC policies related to DR, DER, and otherwise lowering barriers for new entrants to be treated similarly with other resources. By issuing this NOI, FERC seeks "to examine whether changing circumstances warrant revising the Commission's regulations providing for the Demand Response Opt-Out established in Order Nos. 719 and 719-A, and more specifically, whether RTO/ISO markets would significantly benefit from the increased participation of aggregated demand response resources that are currently barred by RERRAs exercising the Demand Response Opt-Out."[5]

B. About 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 as to the issues raised in this proceeding regarding the growth and development of wholesale markets, ensuring transparency in wholesale market structures, reducing barriers to entry in wholesale markets and seeking to lower costs via market-based solutions. Accordingly, their interests cannot be represented by any other party, and their intervention is in the public interest.

C. Communications

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

Devin Hartman[6]
Director, Energy and Environmental Policy;
Resident Senior Fellow
R Street Institute
1212 New York Avenue, NW, Suite 900

Chris Villarreal
Associate Fellow, Energy and
Environmental Policy
R Street Institute
9492 Olympia Drive

[4] *Id.* at P 4.
[5] *Id.* at P 18.
[6] Person designated for service.

Washington, D.C. 20005
Tel: (630) 399-4053
Email: dhartman@rstreet.org

Eden Prairie, MN 55347
Tel: (415) 680-4224
Email: cvillarreal@rstreet.org

D. Comments

R Street supports FERC's interest in considering the reasonableness of the ability of a jurisdiction to opt-out of allowing ARCs to participate in their jurisdiction. With the passage of orders, such as Orders 745, 841, and 2222, FERC has made it clear that markets operate best when more resources are able to participate directly in those markets. By asking questions about the state of DR across organized markets, FERC is taking a reasoned, but proactive step towards greater utilization of DR, enhancing competition, and providing the RTO/ISOs with as many options as available; such flexibility will be important as our electricity systems see increasing amounts of renewables.

R Street provides comments on the following questions, as prepared by FERC.

1. Questions Regarding Changed Circumstances Relevant to the Demand Response Opt-Out Since Issuance of Order Nos. 719 and 719-A

Q1) To what extent have the type and capabilities of demand response technologies and aggregations available to parties seeking to participate in RTO/ISO markets changed since 2009?

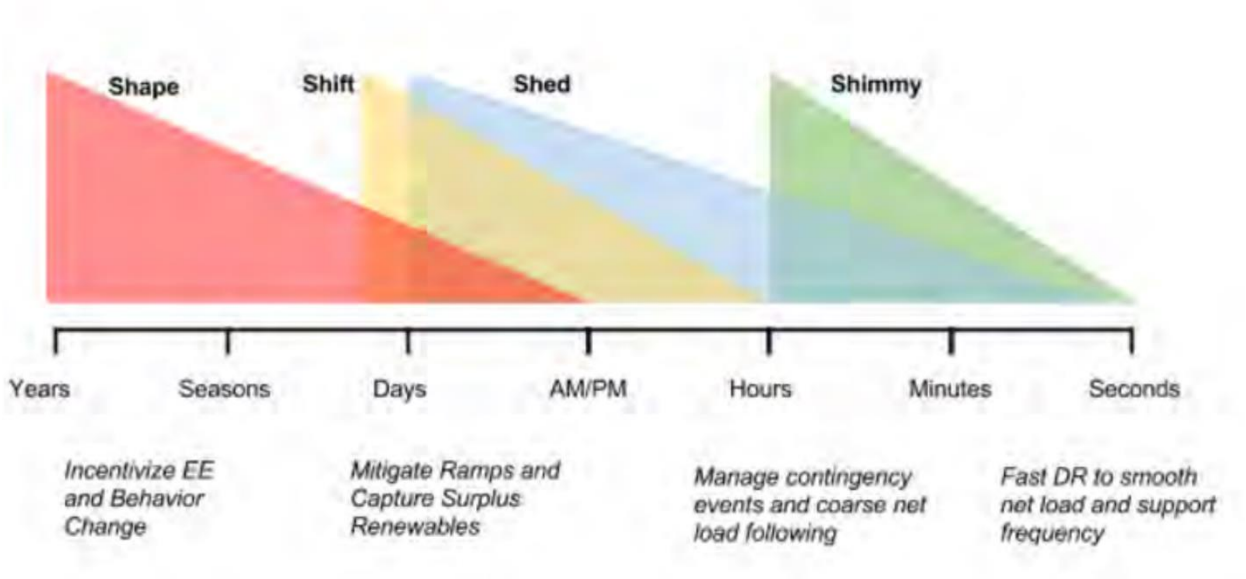
Historically, demand response programs have been focused on interruptible programs where a customer's electricity is reduced by a certain amount for a given period of time. These types of programs include cycling air conditioners during summer months or having commercial and industrial customers be on curtailment programs. These programs were typically triggered by an emergency event, and customers were compensated up front or as a credit to their utility bill. All told, these types of programs are very blunt tools available to utilities and system operators to be used mostly in emergency situations when a system needs an immediate reduction in demand in order to maintain system reliability.

Today, however, we have far greater ability to manage demand. Perhaps most well known is a report issued by Lawrence Berkeley National Lab (LBNL) for the California Public Utilities Commission that looked at California's demand response potential in 2025.[7] In this report, LBNL identified four types of demand response effects, which they labeled "Shape," "Shift," "Shed," and "Shimmy":

[7] 2025 California Demand Response Potential Study – Charting California's Demand Response Future: Final Report on Phase 2 Results, P. Alstone, et al., Lawrence Berkeley National Lab, LBNL-2001113 (March 2017). https://eta-publications.lbl.gov/sites/default/files/lbnl-2001113.pdf

- Shape captures DR that reshapes customer load profiles through price response or on behavioral campaigns—"load-modifying DR"—with advance notice of months to days.
- Shift represents DR that encourages the movement of energy consumption from times of high demand to times of day when there is a surplus of renewable generation. Shift could smooth net load ramps associated with daily patterns of solar energy generation.
- Shed describes loads that can be curtailed to provide peak capacity and support the system in emergency or contingency events—at the statewide level, in local areas of high load, and on the distribution system, with a range in dispatch advance notice times.
- Shimmy involves using loads to dynamically adjust demand on the system to alleviate short-run ramps and disturbances at timescales ranging from seconds up to an hour.[8]

As illustrated here, each of the four types of demand response have different response times and can be used for different purposes.[9]



This is in contrast to the historical types of demand response that were used mostly in response to emergency events and were either on or off. Here, with new technologies and modeling algorithms, demand can be used in multiple ways that can provide benefits to RTO/ISO markets and savings to customers. While shed programs continue to be part of demand response efforts, there are new options for using demand response, including shaping customer demand over longer time periods, which impacts customer load profiles to shimmy programs which are going to be more dynamic and subject to the real-time fluctuations in market operations.

These new types of demand response can be offered as customers have more technology available to them since 2009. To name a few, there are substantially more advanced meters in place across the country, increases in adoption of smart and communicable thermostats,

[8] *Id.* at 1-1, 1-2.
[9] *Id.* at 3-14.

growth in electric vehicle adoption, and other home products like Amazon Alexa, which can help manage demand inside a premises. With these technologies come greater ability to dig into data and identify customer trends and profiles that can provide customers with more detailed information about their usage and can craft a product that is better tailored to the customer's need.

Q2) To what extent have advances in communications, controls, and information technology created new demand response capabilities available to parties seeking to participate in RTO/ISO markets since 2009?

a) For example, what impact, if any, has broader deployment of advanced metering infrastructure (AMI) had on the availability and utilization of demand response for aggregators seeking to participate in RTO/ISO markets?

The roll-out of advanced metering infrastructure has had a significant impact on demand response. Unfortunately, its ability to provide additional support has often been stymied by the inability of ARCs to easily access customer usage information. The data generated by AMI is far greater than what is available with a traditional, analog meter. Previously, data was generated once a month, now, data is generated every 15 minutes by AMI. This information can be used by utilities and third parties to develop more specific demand response products, identify potential savings from demand response products, and assist in the settlement of demand response participation in wholesale markets. While efforts like the Green Button and Green Button Connect My Data have made strides in standardizing data sharing, many utilities have not implemented a certified version of this standard, which has impacted the interoperability benefits of leveraging standards. To be sure, access to this information is only available when the customer consents to the sharing of their data, but when a customer consents, then that company should be able to easily collect customer data in a standardized manner.

Many states have made efforts to develop uniform data access frameworks, including identification of the technical specification to enable the sharing of customer usage data with third parties upon customer consent. The Green Button, which was developed in 2012 as part of the Smart Grid Interoperability Panel effort, as directed by the Energy Independence and Security Act of 2007, was developed to enable the sharing of customer usage data in a standard manner and promote interoperability. The ability of an aggregator to obtain information generated by AMI in a standardized manner is vital to the development of aggregator demand response products. By having that data, with customer consent, the aggregator will be able to tailor products for customers and provide customers with upfront estimates of savings if a customer enrolls in that product offering.

A 2019 report from ACEEE noted that the implementation of AMI can provide additional benefits in the development of demand response programs such as identifying customers that could potentially be part of a demand response program or doing a better job of determining

customer savings through the use of AMI data.[10] This report found that utilities it reviewed were likely to "not perceive a need to know and understand their customers" which means "they miss out on the benefits of customer targeting, feedback, and more robust [measurement and verification]."[11] In other words, there is a gap in utilization of AMI infrastructure, including the data generated by AMI, that can be filled by more competitive providers, such as ARCs so that customers can realize benefits from those AMI investments. A recent R Street report notes that "AMI systems have the potential to create far greater value by reducing energy consumption, improving grid resiliency and supporting new products and services for customers."[12]

b) Has experience with RTO/ISO deployment of demand response resources demonstrated any system-wide value or operational benefits that accrue, more efficiently and effectively, via RTO/ISO dispatch through aggregators than would be available otherwise?

R Street has no comment to this question.

Q3) To what extent have changes in the resource mix since 2009 increased the need for aggregations of demand response in RTO/ISO markets, particularly demand response that can respond to operator instructions in real time? Have impacts of these trends been different in states that have adopted the Demand Response Opt-Out?

The LBNL paper mentioned above focuses on the California demand response market. Notably, California is a leading state on enabling ARCs to participate in their market, so more innovative demand response offerings have shown up there, compared to markets where states have opted out of allowing aggregators. Importantly, California also has significant amounts of solar on its system, which has resulted in the need for more flexible resources that are capable of providing a variety of services, such as ramping needs in the morning and evening as solar production ramps up and down; real-time flexibility as wind and solar production varies over the course of a day; and be a resource more generally in competition with traditional resources.

In other markets, such as the Midcontinent Independent System Operator (MISO), it has also seen increases in the amount of solar and especially wind since 2009. However, all but one state has opted out of allowing ARCs to participate, so most demand response programs remain under the control of utilities. In this case, utilities have a financial incentive in these states to prefer generation resources over utilizing demand-side resources. The lack of competitive pressure from ARCs in the provision of new demand response opportunities for customers as well as the opportunity to participate directly in wholesale markets means utilities are not

[10] "Leveraging Advanced Metering Infrastructure To Save Energy," Gold, R., *et al.*, ACEEE at 20-22 (January 2020). https://www.aceee.org/research-report/u2001

[11] *Id.* at 31.

[12] "Leveraging Competitive Markets to Unlock the True Value of AMI," R Street Policy Study No. 209, Kagan, M., at 2 (October 2020). https://www.rstreet.org/wp-content/uploads/2020/10/Update-final-209-AMI-Investment.pdf

exposed to cost pressure or discipline that might otherwise be available in a competitive market, especially in response to growing amount of renewables in Midwest markets.

Increasingly, markets, such as MISO, will need not only long-duration resources, but much more flexible resources to respond to changes occurring at the bulk and retail level with growth of renewables and DER, including electric vehicles. A resource like demand response is uniquely capable of providing a wide variety of services, as noted by LBNL, in wholesale markets. Unfortunately, existing market rules and lack of ARC participation in certain markets have not provided the push or the incentive for those markets to more fully embrace demand response, much less ARCs and aggregated demand response.

It is also important to note that demand response should not be seen solely as a load reduction. As changes to resource mixes occur across the country, there may be times of the day where prices are low or negative as excess wind or solar are added to the grid. In these cases, demand response can play a role by consuming this excess electricity to help manage the grid. Examples of this can be found in retail electric vehicle rate designs where a stand-alone electric vehicle rate design will include a very low kilowatt-per-hour (kWh) price to reflect the lower prices that occur in overnight hours and a high kWh price that reflects the higher price to serve demand during the day. These prices encourage charging consumption when demand is lower, but also to consume excess wind production during overnight hours.

Q4) The North American Electric Reliability Corporation (NERC) has stated that demand response provides transmission system operators with additional system-balancing tools to maintain bulk-power system reliability. NERC has also stated that, as the resource mix changes, flexible resources that can be called upon on short notice, including demand response, are needed to ensure resource adequacy and meet ramping needs. To what extent can demand response aggregations provide real-time balancing and essential grid services, such as frequency response and ramping capability, to support bulk-power system operations? Are third-party demand response aggregators equally able to provide real-time balancing and essential grid services, or are utility-operated programs better suited to provide them? Are transmission system operators better able to leverage these capabilities given developments in technology and infrastructure since 2009?

R Street believes that, with new technical capabilities available to aggregators, demand response is capable of providing more fast responsive services. However, R Street notes that for demand response to be eligible for participating in these products, RTO/ISOs may require sophisticated metering and telemetry equipment that may not be necessary or cost-effective for demand response to be eligible for services like regulation or frequency products. Aggregators have made great strides in using algorithms and data analytics to provide insight into the operation of those customers in an aggregation, and it may be possible for those analytical models to satisfy RTO/ISO engineering standards. But if an RTO/ISO requires a certain level of metering and telemetry then it may be cost prohibitive for those aggregators to provide those higher level services.

2. Questions Regarding Potential Benefits of Removing the Demand Response Opt-Out

Q5) What are the potential benefits of removing the Demand Response Opt-Out, including any benefits not considered by the Commission in Order Nos. 719 and 719-A, and considering any changed circumstances that may be relevant? Please note if such benefits were not previously highlighted in Order Nos. 719 and 719-A. Please provide quantitative estimates, if possible. In addition, please describe the types of entities to which any benefits would accrue.

R Street believes that there remain significant benefits to removing the demand response opt-out. First and foremost, removing the opt-out will allow for greater product innovation for customers, as well as the potential for greater customer savings by those participating in demand response aggregations. To put it directly, demand response remains an underutilized resource across the country. Considering the recent weather and reliability issues in areas around the country, demand response will be increasingly important as a resource for system operators in response to higher temperatures in the summer, cold temperatures in the winter, wildfires, and being otherwise available to provide flexibility with greater amounts of wind and solar. For those areas that went through recent weather-related electricity events, voluntary customer response was used by customers as a public service and this customer response was uncompensated. R Street believes that this is an example where market rules and opportunities can be better developed to support demand response to be available everyday so that the significant efforts made by customers to avert outages can be minimized, but also that their flexibility and willingness to respond can be compensated.[13]

With the demand response opt-out in place, R Street believes that it has become more difficult to effectively align the demand side with the supply side, as well as the retail with the wholesale. R Street expects that there will be a greater need for demand and supply to be better integrated into one resource mix, and that there will need to be better coordination between retail and wholesale to account for the impacts of the distribution system on the bulk power system. Existing monopoly programs, especially in those areas with an opt-out are not capable to keeping up with these efforts, and utilities may not fully deploy demand response as a solution, preferring to build new generation or infrastructure instead.

By having greater amounts of demand response participating in wholesale markets, RTO/ISOs can use that demand response to reduce costs in market operations, use demand response in their planning models and reduce the amount of generation needed at particular times, which will avoid the construction of new infrastructure and increase costs, enable greater customer opportunities and savings, and result in an overall more efficient system. Lowering barriers to entry for ARCs, and allowing them to participate on an equal footing with supply, will bring

[13] *See*, e.*g.*, "How can customers help avoid future widespread outages in Texas?," Villarreal, C., R Street (April 8, 2021). https://www.rstreet.org/2021/04/08/how-can-customers-help-avoid-future-widespread-outages-in-texas/

about greater opportunities for customer savings and societal benefits through the avoidance of new generation or other investments.

Q6) What are the potential benefits of creating more consistency between the participation models for ARCs and distributed energy resource aggregators by removing the Demand Response Opt-Out? In light of market participation opportunities for energy efficiency resources, electric storage resources, and distributed energy resource aggregations, would eliminating the Demand Response Opt-Out established in Order Nos. 719 and 719-A enhance clarity for market participants and prevent disputes regarding the eligibility of resource aggregations to participate in wholesale markets?

R Street supports removing the demand response opt-out for the reason articulated in this question. FERC efforts to lower barriers to entry for storage, energy efficiency, and DER results in demand response being treated inequitably compared to those other resources. This means that companies that offer such products and services and are working directly with customers cannot offer them demand response opportunities. By maintaining a demand response opt-out, this has become a barrier to entry for third parties in contravention of FERC's goals in its other proceedings. By eliminating the demand response opt-out, this would allow ARCs to offer a wider variety of products, including the combination of product offerings. This would enhance the efficiency of the market and operations, which would lower customer acquisition costs.

R Street would not agree with suggestions that ARCs will just cherry-pick from existing utility programs. The system is in need of more customers, more and different types of products and services, and more entrants to provide more competition in wholesale markets. To the extent existing utility DR programs are predominantly emergency programs, these resources largely go uncalled for years at a time; even when needed, utilities may prefer to dispatch supply side resources rather than dispatch demand response instead. For example, in a filing to the Minnesota Public Utilities Commission, Xcel noted that for its demand response programs, between the years 2015 and 2019, it called its demand responses programs once in response to a system need and only once in response to high prices in MISO.[14] Both events appear to be in response to the 2019 Polar Vortex event. Of note, Xcel states that "High power costs, as indicated by Locational Marginal Prices (LMPs) in the MISO market, do not always indicate the need for activation of our Demand Response Resources."[15] This indicates a disconnect between the purpose of high prices in a market, like MISO, and the availability and use of existing utility demand response programs; if a high price is not sufficient for a utility to call a demand

[14] Xcel Energy Response to Minnesota Public Utilities Commission Information Request No. 3-4, Docket No. E002/CI-17-401 (January 17, 2020). https://www.edockets.state.mn.us/EFiling/edockets/searchDocuments.do?method=showPoup&documentId={E020EE6F-0000-CC1A-AE78-982A9CCFACC4}&documentTitle=20201-159731-01

[15] *Id.* at Information Request No. 4 at 2.

response program, then FERC should consider whether other entities can develop demand response programs that would be responsive to price signals.

Removing the demand response opt-out should make it easier for RTO/ISOs to implement participation requirements and decrease complexity, especially for Order 2222 implementation. Since FERC includes demand response as a DER, maintaining a demand response opt-out will mean ARCs will not have the ability to offer innovative products that cross both options. Instead, an ARC will need to craft a specific DER product that does not include demand response; while possible, being able to offer demand response along with DER offerings will allow ARCs to better craft products and lower their costs. This should also reduce confusion at the RTO/ISO level now that they would not have to maintain a separate set of policies for DR participation and DER participation.

Q7) Is there any evidence to suggest that removing the Demand Response Opt-Out would result in additional demand response resources participating through aggregations in RTO/ISO markets? Similarly, is there any evidence to suggest that removing the Demand Response Opt-Out would result in additional demand response services or flexibility to address system needs? If so, are there ways to quantify these benefits to RTO/ISO markets? Do the benefits of permitting increased third-party demand response aggregations in RTO/ISO markets exceed those provided by utilities bidding demand response into such markets?

In R Street's opinion, any amount of additional demand response participation in RTO/ISO markets will provide greater benefits than existing utility programs since many of those utility programs are not called, sometimes for many years. In which case, any amount of regular participation by ARCs will be better than existing utility products in those areas with a demand response opt-out. As noted in the Xcel Energy example, Xcel's position appears to be that high prices are not a sufficient trigger for deploying their demand response programs; therefore, any new entrants that are price responsive, actively participate in the market, and respond to prices would in fact result in not only more demand response in the market, but have it actually be used, which would lower wholesale market prices to the benefit of all participants and customers, and allow those participating customers to be compensated for their participation.

If existing utility demand response programs are similar to Xcel's, then there is a significant amount of utility demand response programs that are not responsive to price or day-to-day system needs; rather, these programs appear to be dispatchable in accordance with MISO's rules. Due to this lack of price-responsive demand response, wholesale prices might be higher than they otherwise would be with more active demand response products. Furthermore, ARCs have an interest in signing up customers and participating in wholesale markets since their business model is in developing and deploying demand response products to customers. Greater amounts of demand response, especially price responsive demand response and demand response to support day-to-day system needs will be increasingly valuable as RTO/ISO markets seek more flexible resources in response to growth of renewables and DER.

Q8) Is there any other evidence to suggest that RTO/ISO market rules reflecting the Demand Response Opt-Out are no longer just and reasonable?

As evidenced by the Xcel example above, some RTO/ISO market rules may be unnecessarily limiting the use and applicability of demand response in their markets. Even though Order 745 directed RTO/ISOs to develop tariffs for greater use of demand response in their markets, since some RTO/ISOs are in areas with significant amount of demand response opt-out jurisdictions, there may not be tariffs in place today that provide demand response with as many options and opportunities as other RTO/ISOs. An RTO like MISO, where only one state allows ARCs, may have developed rules that are more favorable to utility retail demand response programs rather than develop tariffs that allow for more options for demand response participation beyond emergency response programs.

R Street also notes that the quality and availability of granular pricing information differs across RTOs and ISOs. Some RTOs provide updated LMP information on very granular basis, while other RTOs make more aggregated zonal pricing information available, while participants have to wait several days for the more detailed nodal pricing to be available. The lack of consistent posting and availability of pricing information may also pose a barrier to more development and deployment of demand response in RTO/ISOs. In other words, if an ARC is looking to develop a new demand response aggregation within an area of an RTO, having easy accessibility to LMP and nodal pricing in a transparent manner will greatly benefit the ARC in identifying higher priced areas. Being able to identify those high-priced areas, then take either that nodal price or an aggregation of nodes, such as that suggested in Order 2222 regarding multi-nodal aggregations, would ensure that the demand response is occurring in an area of need for that RTO/ISO, and not just occurring in lower priced areas where it may have less benefit.

3. Questions Regarding Potential Resulting Burdens from Removing the Demand Response Opt-Out

Q9) To what extent has the Demand Response Opt-Out prevented interference with the operation of existing retail demand response programs, or avoided placing an undue burden on state and local retail regulatory entities, as noted in Order No. 719?

To the extent a state has not allowed ARCs to participate, that means those states have avoided certain program implementation rules and requirements, such as registration of ARCs, enabling customer data access, development of information sharing guidelines between an ARC and a utility, and any other customer protection rules a state may seek to implement to govern ARC participation in a given jurisdiction. However, with the implementation of Order 2222, jurisdictions will have to address these issues anyway for DER aggregators. In other words, even if a jurisdiction continues to prohibit ARCs, with DER aggregators, a jurisdiction will likely need to develop DER aggregator registration requirements, develop appropriate customer data access processes, and determine information sharing guidelines between the utility and the

DER aggregator. So, any tariffs or rules that a jurisdiction will need to develop for a DER will likely be the same or very similar for an ARC.

Q10) What potential costs and burdens might result from removing the Demand Response Opt-Out, considering any of the changed circumstances explored above? Please note any burdens that were not previously mentioned in Order Nos. 719 and 719-A. Please provide quantitative estimates, if possible.

As noted above, jurisdictions and utilities may claim that ARCs will cherry-pick existing utility demand response programs, which will increase the costs of utility demand response programs. R Street notes that existing utility programs may not be being used to their full potential to begin with and if a utility becomes subject to some amount of competition, then this may improve their program design.

Q11) Are there any downsides to increased participation of aggregators of demand response in RTO/ISO markets from states currently exercising the Demand Response Opt-Out that may warrant the Commission's consideration? If so, please describe the potential downsides and the types of entities that would bear these burdens.

R Street has no comment to this question.

Q12) Is there a significant difference between any costs and burdens from complying with Order No. 2222 and those that might result from removal of the Demand Response Opt-Out? If so, why would removal of the Demand Response Opt-Out create more costs and burdens?

As noted in response to Question 9, R Street believes that many of the costs and program development rules that will need to be implemented in response to Order 2222 would need to be done to enable demand response aggregation.

II. Conclusion

R Street appreciates the opportunity to provide comments on this important topic. With increasing amounts of variable resources and growth of electric vehicles and DER, the electricity system will be a very different situation than in 2009, when FERC adopted the demand response opt-out policy. R Street agrees with FERC that a reconsideration of that policy is warranted in response to these changes, as well as the greater availability of technology at the hands of customers. Since 2009, the demand response opt-out has limited substantial opportunities for saving customer money and lowering system costs in those jurisdictions that implemented the opt-out. With FERC's long-standing goal of removing barriers to entry for competition and new technologies, the demand response opt-out remains as an oddity whose time has come for reconsideration.

Respectfully submitted,

/s/ Christopher Villarreal

Christopher Villarreal
R Street Institute
1212 New York Avenue, NW, Suite 900
Washington, D.C., 20005
Telephone: (415) 680-4224
Email: cvillarreal@rstreet.org

Dated at Washington, D.C.
This 23rd Day of July 2021

CERTIFICATE OF SERVICE

The undersigned hereby certifies that one copy of the foregoing pleading has this day been served in a manner permitted by Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010) on each person whose name appears on the Official Service List compiled by the Secretary in this proceeding.

/s/ Christopher Villarreal
Christopher Villarreal

Dated at Washington, D.C.
This 23rd Day of July 2021.