UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Participation of Distributed Energy Resource Aggregations in Markets Operated by Regional Transmission Organizations and Independent System Operators)

DOCKET NO. RM18-9-000

MOTION TO FILE COMMENTS OUT-OF-TIME AND COMMENTS OF PUBLIC INTEREST ORGANIZATIONS

Pursuant to Commission Staff’s September 5, 2019 data requests in this docket, the undersigned Public Interest Organizations (PIOs) hereby move to submit out-of-time and submit the following comments on the responses by six Regional Transmission Organizations (RTOs) and Independent System Operators (ISOs) to the Federal Energy Regulatory Commission’s (FERC’s or the Commission’s) September 5, 2019 data requests.

I. MOTION TO FILE COMMENTS OUT-OF-TIME

PIOs respectfully request that they be allowed to file these comments out-of-time. PIOs have been an active party in these proceedings. Accepting PIOs’ comments will not disrupt the proceeding, cause delay, or place any additional burdens on any party to the proceeding. PIOs accept the record of this proceeding as it stands. PIOs seek to provide additional information useful to the Commission in its decision making process. Thus, good cause exists to grant this motion.¹

¹ See e.g., Trans Alaska Pipeline System, et al., 104 FERC ¶ 61,201, at 61,706 (2003)
II. BACKGROUND

On September 5, 2019, the Office of Energy Policy and Innovation issued a data request to ISOs and RTOs under Docket No. RM-18-9-000 (the “Data Request”). The Commission sought answers on how ISOs and RTOs handled the interconnection process of distributed energy resources (DERs) that wished to access the wholesale market through the distribution network, in particular DERs that sought to participate in aggregations. In October 2019, the ISOs and RTOs filed their individual responses.³

This data request was part of a larger effort by the Commission to gather information related to the November 17, 2016 Notice of Proposed Rulemaking (NOPR) concerning Electric Storage Participation in Markets Operated by RTOs and ISOs.⁴ Prior to the Data Request, the Commission had received comments on the NOPR, held a Technical Conference on April 10-11, 2018, and received comments submitted in response to the Technical Conference.

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² We follow the definition of DERs from NOPR n. 2, which is limited to resources “located on the distribution system, any subsystem thereof, or behind a customer meter.”


III. COMMENTS

A. Summary

PIOs continue to strongly support the framework the Commission proposed under its NOPR, subject to several clarifications provided in our comments filed on February 14, 2017. None of the answers provided by any ISO or RTO give a compelling reason that wholesale market participation by DER aggregations is not possible. Indeed, the responses of CAISO, ISO-NE and NYISO indicate that they have some degree of aggregation available to DERs today. However, the answers provide evidence that barriers do exist for DERs to aggregate and participate in wholesale markets, creating undue discrimination and unjust and unreasonable rates.

The Data Request focuses on issues related to interconnection of DERs. Those issues are particularly challenging because of the jurisdictional split between FERC and States. The responses describe a wide variety of RTO approaches to resolving those jurisdictional and coordination challenges and highlight the vast differences in different regions in the time, expense and effort required for a DER to enter wholesale markets.

Interconnection of individual DERs is a prerequisite to aggregation. The responses highlight that some FERC jurisdictional RTO and ISO tariffs present significant barriers to DER interconnection—in particular, many RTOs require that every individual DER complete a wholesale interconnection process before gaining access to wholesale markets, either individually or as part of an aggregate.

As the Commission has noted in this proceeding, “The smaller a resource is, the more likely the transaction costs to sell services into the organized wholesale electric markets
outweigh the benefits…”5 The Data Responses provide evidence supporting this concern. Interconnection remains a major transaction cost, with the current situation in some RTOs creating barriers to market participation. The Commission has already made a preliminary finding that these barriers could lead to unjust and unreasonable rates.6

At the same time, other responses show that some RTO/ISO practices facilitate DER market participation. It is thus appropriate and timely for the final order to standardize certain aspects of how RTOs/ISOs treat resources seeking wholesale market participation that are located on distribution systems not subject to FERC jurisdiction.

Jurisdiction over DERs remains a sensitive issue.7 Our comments here attempt to avoid the most controversial areas. Rather, we focus on reforms that are firmly on the FERC side of the border. These include requiring RTOs/ISOs to accept the interconnection procedures set by distribution authorities, that RTOs/ISOs limit their studies to FERC-jurisdictional systems, and similar suggestions that clarify procedures in this area, generally leading to greater deference to distribution authorities for matters within their jurisdiction. In broad strokes, we propose:

- DER interconnection be established as firmly, and solely, under retail jurisdiction, subject only to the constraint that retail interconnection procedures must be non-discriminatory with regard to whether a resource intends to participate under retail tariffs or sell into wholesale markets.

6 NOPR at 13-16.
7 See, e.g., Nat'l Assoc. of Regulatory Utility Commissioners v. FERC, No. 19-1142 (filed D.C. Circuit 2019, pending).
• DERs may be aggregated by utilities or 3rd parties and presented to RTOs under FERC jurisdictional rates and conditions.

• RTO/ISO handling of DER aggregations must be limited to market rules, and, where cause is shown, to transmission system impacts. RTOs/ISOs should not attempt to go “behind the substation” and inject themselves into distribution system interconnection processes.

This proposal echoes the successful treatment of demand resources developed following Order No. 719. For a demand resource, “interconnection” is taking retail service, which occurs entirely outside RTO’s view. Demand resources, singly or in aggregation, are generally presented to RTOs through registration processes which are far easier and cheaper than generator interconnection. The approach used for demand resources has the advantage of removing significant barriers to participation, furthering the goals of the NOPR. It also has the feature of placing responsibility for mass-market activities with the state regulators and their utilities best prepared to handle them. The quantity of DERs installed is plausibly expected to grow rapidly to exceed the number of resources currently interconnected by orders of magnitude. Continuing the current situation where each DER requires a FERC-jurisdictional interconnection risks overwhelming RTOs/ISOs with a quantity of service requests they are utterly unprepared to handle. A model that appropriately divides oversight of DERs between retail and wholesale authorities is the best way to avoid this situation.11

9 125 FERC ¶ 61,071 (October 17, 2008).

11 E.g., PJM currently handles almost 14,000 demand response registrations annually, representing millions of retail customers, but has in total less than 1/10th as many interconnected generators. See 2019 Demand Response Operations Markets Activity Report: October 2019 at 4
B. RTO/ISO Interconnection Procedures Create Significant Barriers to DER Participation in Wholesale Markets.

Responses to the Data Requests reveal that the interconnection process creates barriers for DERs to access wholesale markets. The concerns raised by the RTO Responses would be helped by a DER aggregation rule, as described in the NOPR and modified with our previous comments, both through the rule itself and through the rule providing a framework for the aspects more appropriately addressed by utilities, states, or ISO or RTO stakeholders.

1. Interconnection procedures designed for large generators remain and pose barriers for DERs.

In 2013, FERC issued Order No, 792, the Final Rule on Small Generation Interconnection Agreements and Procedures.\(^\text{12}\) In the SGIP Rule, the Commission found that the growth in small generating facilities was leading to large numbers of interconnection requests, and that then-current interconnection rules resulted in inefficient backlogs and unnecessary costs to consumers.\(^\text{13}\) The SGIP Rule ordered a series of reforms to RTO/ISO interconnection procedures for small generators to alleviate those issues.

In the SGIP Rule, FERC noted that the surge in small generator interconnection requests was partially driven by state renewable portfolio standards and lower capital costs.\(^\text{14}\) Since then, these trends have only accelerated: state renewable portfolio standards have rapidly increased in

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\(^{12}\) 145 FERC ¶ 61,159 (November 22, 2013) (SGIP Rule)

\(^{13}\) SGIP rule at 21-23

\(^{14}\) *Id.* at 23.
scope and ambition; capital costs of solar, storage, and related technologies continue to fall; and states have enacted additional policies supporting distributed energy resources for resilience, environmental, and other reasons. However, the RTO Responses show that despite Order No. 792, interconnection procedures remain barriers to small generator participation.

The RTO Responses to Data Request question 15 demonstrate the Order No. 792 is not fully achieving its goals of streamlining interconnection.

- PJM, while having a separate process for Small Generation Resources, still requires DERs to go through an extensive interconnection process involving multiple studies. PJM cites jurisdictional issues as preventing it from applying SGIP screens in the case when small generators interconnect through non-FERC jurisdictional facilities. From the record, it is unclear if similar concerns arise in other RTOs/ISOs.

- NYISO’s proposed tariff revisions have done a better job than many at modifying their processes to account for small generators. For example, any interconnecting facility that requests 2 MW or less of capacity interconnection service may do so without being evaluated under the NYISO Deliverability Interconnection Standard, regardless of whether the facility was subject to SGIP or another interconnection process.17 However, a lack of changes around telemetry requirements shows how a final rule could help address market entry barriers by mandating that ISOs and RTOs look at every aspect of the aggregation process. Requiring every facility (most of

15 “Under your RTO’s/ISO’s existing rules for small generator interconnection, if a DER seeks to participate in wholesale markets and plans to interconnect at the distribution level, please describe the step-by-step process by which that resource would interconnect to the system.” Data request at 1.

17 NYISO Response P 3.
which are likely small) to have the same metering and telemetry requirements as large generators will require DER facilities to bear significant costs. Instead, ISOs and RTOs should tailor telemetry to the market(s) the applicable resource aggregation will participate in.

Failure to apply SGIP or similar rules will create increasing problems as more DERs seek access to wholesale market. Allowing DERs to aggregate and perform wholesale interconnection studies on an aggregated scale adds efficiency to the process, lowers costs for DERs, and requires fewer administrative resources to complete. However, many of these efficiencies will be lost if the process for aggregation is itself overly burdensome. In the Final Rule in this docket the Commission should clarify that rules applying to the FERC jurisdictional portion of small generator and DER aggregation interconnections must follow the SGIP Rule, or RTO specific rules providing at least equivalent benefits.

2. Some RTOs and ISOs require inconsistent and duplicative interconnection studies in order to have access to the wholesale market.

The Federal Power Act’s federalist approach to electricity regulation creates unique issues at the interface between state jurisdictional distribution systems and federal jurisdictional wholesale power markets. Up until now, this has been addressed in a somewhat ad hoc manner, centering on the “dual-use doctrine.”18 The dual-use doctrine holds that FERC may only exercise jurisdiction over interconnection to a Local Distribution Facility19 once there has been a wholesale transaction over that facility prior to the new interconnection request.

18 See Standardization of Generator Interconnection Agreements and Procedures (July 2003) 104 FERC ¶ 61,103 (Order 2003) at 803-809. See also Order Rejecting Filings (February 2006) 114 FERC ¶ 61,191 at 14.

19 16 U.S.C § 824(b)(1).
The RTO Responses demonstrate that this creates inconsistency in how RTOs interface with non-FERC jurisdictional interconnection processes, often leading to significant inefficiencies. These difficulties will only increase, since as DERs become prevalent, the number of distribution facilities that have hosted wholesale transactions will also grow.

DERs have to undergo interconnection studies by the distribution utility to interconnect to the distribution system. These studies are typically governed by a state tariff and require consideration of impacts the DER will have on the distribution system. However, several ISOs and RTOs require additional studies for before DERs may access to the wholesale market, some of which are unnecessary and burdensome.

- PJM requires resources that are already interconnected under a state jurisdictional process to submit an interconnection request as if it was an entirely new resource to participate in the wholesale market. This requirement applies even to small generators that are already in service, except in the case of Qualifying Facilities. This results in duplicative distribution interconnection studies.

- MISO requires DERs to follow MISO interconnection processes if they wish to provide capacity or if it is interconnecting at a facility that provides Wholesale Distribution Service. Otherwise, the DER follows distribution system processes.

\[\text{\footnotesize 20 PJM Response at 7.} \]
\[\text{\footnotesize 21 MISO Response at 4-5} \]
\[\text{\footnotesize 22 MISO Response at 2.} \]
• ISO-NE is similar, following ISO or local processes depending on if the facility the DER is interconnecting to is a “OATT Interconnection Distribution Facility” and seeks to make wholesale sales.23 DERs already interconnected to OATT Interconnection Facilities under local processes must go through ISO-NE interconnection procedures if they seek to commence wholesale market participation.24

• CAISO tariff allows DERs to participate in CAISO markets if they have interconnected through a state-jurisdictional process.25 DERs may follow state processes regardless of if the facility they are connecting to has previously executed wholesale transactions.26 Similarly, CAISO allows older Qualifying Facilities (QFs) whose original interconnection agreements have expired to participate in the CAISO market without going through the interconnection study process after they’ve formed a Generator Interconnection Agreement (GIA) with CAISO.27 CAISO’s approach of reliance on a confirmed state-jurisdictional interconnection study appropriately respects jurisdictional boundaries and avoids duplicative studies.

23 ISO-NE Response at 3-4.
25 CAISO Response at 9.
26 CASIO Response to question 1b, at 3.
27 CAISO Response at 5.
• Much like CAISO, NYISO’s proposed tariff allows DERs to participate in aggregations without additional study in NYISO’s interconnection process, recognizing that as part of the state jurisdictional interconnection process New York transmission owners review the facilities for any adverse reliability impacts and that NYISO evaluates the impact of the DER on the transmission system in developing its baselines and identifying any adverse reliability impacts requiring upgrades.  

• DERs in SPP follow distribution utility processes unless they are interconnecting to a facility under the functional control of SPP. Resources interconnected under distribution utility procedures may participate in SPP markets without further study.

Just as FERC has ruled for Qualifying Facilities, DERs that are already interconnected to the distribution system and able to inject power into the system should not require additional study in order to participate in the wholesale market. Such DERs are already allowed to inject power; the only question is who they are allowed to sell their services to. ISO/RTO studies of an existing DER serve no engineering purpose, as the DER will continue to be allowed to inject power under state tariffs regardless of the outcome of the ISO/RTO study. It is unreasonable and

\[\text{\footnotesize 28 NYISO Response at 14.}\]
\[\text{\footnotesize 29 SPP Response at 2-3.}\]
\[\text{\footnotesize 30 SPP Response at 6.}\]
\[\text{\footnotesize 32 104 FERC ¶ 61,103 (Order No. 2003) at 815.}\]
unduly discriminatory to require engineering studies of something a resource already has permission to do simply as a prerequisite for market access. The Commission should standardize on the CAISO, SPP, and NYISO approach, and order that ISO/RTO studies of properly interconnected DERs should be limited to cases where the ISO/RTO has demonstrated needs beyond those of the distribution interconnection study.\(^{33}\)

Several RTOs appear to interpret the dual-use doctrine as meaning that they have exclusive authority over DER interconnection to dual-use facilities. This leads to complex procedures where otherwise identically situated DERs may face vastly different interconnection hurdles. For example, a 100kW resource interconnecting under Maryland state jurisdictional procedures is charged $150, while a 100kW resource connecting under PJM procedures must make a deposit of $30,000 or more\(^{34}\). Similarly, ISO study processes may take more than a year longer than distribution utility processes for the same resource.\(^{35}\)

In some cases, RTOs assert authority over physical interconnection to Local Distribution Facilities, even though they lack the capability to oversee those interconnections.\(^{36}\) Making

\[^{33}\text{For example, a DER aggregation that wishes to provide capacity might reasonably be required to be studied to see if its output is deliverable to load.}\]

\[^{34}\text{DER Interconnection (August 2018), at 5-7. Available at https://www.pjm.com/-/media/committees-groups/subcommittees/ders/20180827/20180827-item-06-der-supporters-presentation.ashx.}\]

\[^{35}\text{Id. See also Comments of University of Delaware EV R&D Group and A.F. Mensah, Inc. On PJM’s Response to FERC’s Data Request (filed November 11, 2019 in Docket No. RM18-9-000) (“UoD Comments”) at 2-4.}\]

\[^{36}\text{See, e.g., ISO-NE Response at 4. See also, PJM Staff, Jurisdiction over Interconnection and Sales of Generation/Storage on Distribution Facilities (November 2017) at 1. Available at https://www.pjm.com/-/media/committees-groups/committees/mic/20171106-special/20171106-jurisdictional-over-interconnection-of-generation-onto-distribution-facilities.ashx. See also, PJM Staff, State Interconnection Regulations: Scope and Screens}\]
matters worse, many states do not have tariffs governing terms of distribution interconnection for purposes of wholesale market interconnection, but RTOs/ISOs do not have authority or visibility to directly conduct studies of the distribution system. This leaves the distribution portion of wholesale interconnections in a sort of “regulatory black hole” with no clear governing authority, creating regulatory uncertainty and delay. In the worst cases, this situation provides opportunity for inappropriate exercise of Electric Distribution Company (EDC) discretion or for states to put extra-jurisdictional requirements on access to FERC markets.

The Commission should take advantage of this docket to clarify rules regarding the dual-use doctrine and the ‘jurisdictional hand-off’ between state and FERC interconnection processes, and to promote RTO best practices. Specifically, the Commission should clarify that the dual-use doctrine (1) does not require RTOs to assert authority over interconnections when state procedures are available; (2) does not prevent DERs connecting to dual-use facilities from utilizing existing state interconnection procedures, when they exist; and (3) does not prevent RTOs from honoring interconnections to dual-use facilities executed under state procedures. Further, the Commission should order (1) RTOs to respect the results of state-jurisdictional interconnection studies, and limit their own processes to impacts on the transmission systems; (2) RTOs to show cause as to why further study is needed for small generators that are already in operation under state jurisdictional processes and wish only to enter wholesale markets without physical change; and (3) state jurisdictional interconnection processes not unduly discriminate solely on the basis of if a resource chooses to sell into wholesale markets.

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FERC has authority to order item (3) above: FERC has authority over all sales of electricity in interstate commerce, including all sales for purposes of resale. This authority includes the exclusive power to set the rates, terms, and conditions of participation in wholesale markets. This means that FERC, and only FERC, can set the terms for DER eligibility, regardless of whether the DER is located on a Local Distribution Facility or elsewhere. 37

FERC jurisdiction over wholesale markets is absolute and not to be determined by “case-by-case analysis”. 38 Once a DER is interconnected to a Local Distribution Facility, the state can have nothing further to say regarding that DER’s eligibility to engage in FERC-jurisdictional sales. Similarly, States have no authority to create interconnection procedures that discriminate on the basis of a DER’s intention to engage in FERC-jurisdictional sales, as states may not attempt to modify or restate a FERC jurisdictional rate. 39 Efforts to do so through prior restraint, or by demanding DER owners relinquish their right to participate in wholesale markets as a condition of interconnection fall squarely under this prohibition. 40 Thus, we believe that states maintain near-absolute authority over local distribution system interconnection. However, that authority does not extend to directly or indirectly conditioning interconnection on the DER’s choice to participate in wholesale power markets once interconnected.

C. Several ISOs and RTOs have no process for aggregation of interconnections.

PJM and MISO all currently lack any process for aggregating interconnection studies.\(^{41}\) ISO-NE allows ‘clustering’ under certain limited circumstances\(^{42}\) and SPP allows aggregated studies upon consultation with distribution utilities and transmission owners.\(^{43}\) Finally, CAISO allows\(^{44}\) and NYISO has proposed aggregated interconnection studies at the transmission node or higher level.\(^{45}\)

Lack of aggregation creates significant barriers to DER interconnection. The cost of interconnection is significant relative to possible revenue for small projects; requiring individual interconnection studies for very small projects will make them uneconomic without reasonable justification. In some cases, lack of appropriate interconnection rules for DERs leads to manifestly unreasonable results: PJM, for example, requires an electric vehicle charging station seeking to interconnect to identify the specific vehicles it will serve, and requires a new interconnection application if a different vehicle were to plug into the station.\(^{47}\)

The CAISO and NYISO Responses provide examples demonstrating that functional aggregation of interconnection requests is possible. We respectfully submit that the Final Order in this rulemaking should direct RTOs to develop aggregation procedures for studying the

\(^{41}\) PJM Response at 6, MISO Response at 10;
\(^{42}\) ISO-NE Response at 12
\(^{43}\) SPP Response at 4.
\(^{44}\) CAISO Response at 6.
\(^{45}\) NYISO Response at 5, 11.
\(^{47}\) UoD Comments at 6. See also Post-Technical Conference Comments of Icetec Energy Services (June 2016, Docket No. RM18-9-000) at 7.
transmission impacts of small resource interconnections at the largest feasible level, but in no
case less than the transmission node.

D. DER and Demand Response Rules Must be Integrated.

1. Market Rules

Several of the RTO Responses indicate that interconnection applies only to the behind-
the-meter resources to the extent they inject power.\(^54\) DERs operating behind a retail customer
meter thus inevitably intersect with demand response rules. At certain times, such a DER will be
offsetting customer load, while at other times it may be injecting power. For example, PJM states
that DER participation in its markets is limited to the export capabilities.\(^55\) However, the portion
of a DER that offsets customer load may be eligible to provide demand response\(^56\).

Splitting a DER into separate demand and generation resources is unduly discriminatory,
as it prevents it from providing all the services that it is technically capable of providing. For
example, consider a DER behind a retail meter participating in a capacity market: if site load is
high at any given moment, relatively more of the capacity will be in demand response, while if
site load is low, more will be delivered through injection. If the load offset and injection portion
of a DER must take on separate capacity obligations, this creates incentives for each to only
commit to its worst-case ability, even though the DER as a whole can deliver more capacity.
Similarly, it is likely impossible for a DER split into DR and generation to follow two separate
frequency regulation setpoints. The situation is further complicated for sites that combine DERs
with curtailment-based demand response.

\(^54\) PJM Response at 5; NYISO Response at 10-11; ISO-NE Response at 11.
\(^55\) PJM Response at 5.
\(^56\) See PJM 2019 DR Report at 8ff, documenting demand response provided by behind-
the-meter generation and batteries.
The Final Order in this docket should resolve this situation and enable behind-the-meter DERs to provide all services of which they are technically capable. Specifically, the Commission should require RTOs to demonstrate that their rules allow behind-the-meter DERs, including those acting in conjunction with load curtailments, to be fully valued regardless of site load at any given moment, or if the site switches from a net consumer to a net injector of power while providing services.

As a related matter, compensation for demand response participating in energy markets is governed by Order No. 745, which dictates that load offsets generally be compensated at LMP. RTOs have differed in their interpretation on how this provision applies to behind the meter DERs offsetting load. The Commission could take advantage of a Final Order to clarify under what circumstances Order No. 745 applies to DERs that are offsetting retail load.

2. Jurisdiction over Behind the Meter Facilities.

Interconnection of behind the meter DERs raises one specific issue that is ripe for resolution. Data Request question 3 asks about differences in the interconnection process for resources behind a retail customer meter. PJM correctly replies that they follow the same interconnection process as other resources. That treatment leads to a likely unintended consequence: if the owner of a behind the meter DER is not the same as the retail customer, PJM considers the retail customer as providing FERC-jurisdictional transmission service between the DER and their point of retail service, and thus ineligible for interconnection unless the retail


customer files an OATT. From the record, it is not clear if other ISOs/RTOs have made similar determinations.

Developing, interconnecting, and managing DERs is a technical and sometimes capital-intensive activity. As might be expected, a variety of business models have arisen where specialized DER providers develop and/or own DERs located on the premises of retail customers. Treating customer-owned facilities behind a retail meter as FERC-jurisdictional transmission providers creates an unreasonable barrier to business models where a third party owns and/or operates the DER, as very few building owners are interested in filing an OATT with FERC. Following precedent in Order No. 807, the Commission could resolve this issue by granting a blanket waiver from OATT requirements for retail customers only subject to those requirements due to their facilities hosting DERs.

E. ISO and RTO responses show that DERs are already safely providing significant levels of capacity and reliability benefits in some ISOs. We support market rules that will allow DERs to provide a full-range of benefits to all markets.

FERC initiated this proceeding recognizing that “distributed energy resources can at times effectively supply the capacity, energy, and ancillary services that are exchanged in the organized wholesale electric markets” but may either be too small to effectively participate alone or may be restricted by the current wholesale electric market rules that “often limit the services distributed energy resources are eligible to provide” or “impos[e] prohibitively expensive or otherwise burdensome requirements”. FERC recognizes the value that DERs are eligible to provide and the barriers generators face when getting their services to market.


60 NOPR P 16.
Responses from ISOs and RTOs underscore the value that DERs can provide. In ISO-NE, DERs provide 7,437 MW of capacity to the system, making up 19.0% of the system’s nameplate capacity. This includes 1,649 MW of Settlement Only Resource (SOR) capacity, resources that do not bid into the capacity market, and 1,975 MW of Solar PV generation that does not participate in the wholesale energy market.61

DERs similarly provide significant capacity in CAISO. While CAISO does not track DERs participating in the CAISO market, it does provide data of non-participating DER interconnections: there is over 7.4 GW of behind-the-meter solar PV installed in CAISO.62 This does not include energy efficiency, battery storage, DR, or other DERs.

While RTO Responses show significant levels of DERs in some regions, they also reveal that many RTOs are not tracking the levels of DERs in their systems. CAISO, a system estimated to have significant amounts of DERs, does not track DER statistics. Additionally, no RTO tracks data or estimates the number of facilities that are subject to an OATT or the total number of distribution facilities in the RTO. ISO-NE notes that doing so is outside of its visibility and NYISO notes they make these distinctions on a case-by-case basis.63 This indicates that the significant amount of DERs already connected to Local Distribution Facilities are not a matter of concern to ISO/RTOs, supporting our argument that onerous wholesale interconnection procedures are unreasonable and unduly discriminatory. With appropriate guidance from the Commission, these DERs may be better integrated into wholesale market operations, improving price formation, economic dispatch, and reliability.

61 ISO-NE Response, P 18.
62 CAISO Response P 12.
63 RTO Responses to Question 9.
ISO and RTO responses show the ability of DERs to exist safely in the system. Even though many of these resources are not participating in the wholesale market, RTOs have still been able to operationally incorporate significant levels of DERs. This suggests that barriers to DERs in wholesale markets are primarily administrative rather than physical, underscoring the need for a Final Order in this docket. Allowing DER participation in wholesale markets does more than open market access to all resources: it allows resources that are frequently already online to be visible by the system operator. This yields significant benefits to the entire system.

IV. CONCLUSION

The RTO and ISO responses to FERC’s data request show that DERs face unreasonable and unduly discriminatory barriers to entry in the interconnection process. DERs face duplicative transmission studies to enter the wholesale market, processes that were designed for large generators and are being used for resources as small as 100 kW, and limited or absent DER aggregation processes. These barriers would be significantly lowered should FERC issue a final rule requiring DER aggregation and streamlining DER interconnection procedures. Although barriers will remain to DER integration that exist outside of the scope of this proceeding, FERC can and must remove the barriers to DER market access within the scope of its jurisdiction.

Where market rules have opened access to DERs, DERs have shown that they can safely provide significant capacity and reliability benefits. Removing barriers to full DER participation in wholesale markets properly falls under the Commission’s charge to ensure just, reasonable, and not unduly discriminatory wholesale rates. The Commission should act expeditiously in issuing its final rule.

Respectfully submitted this 12th day of November, 2019,
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CERTIFICATE OF SERVICE

I hereby certify that I have on this date or the next day caused a copy of the foregoing document to be served on each person included on the official service list maintained for this proceeding by the Commission’s Secretary, by electronic mail or such other means as a party may have requested, in accordance with Rule 2010 of the Commission’s Rules of Practice and Procedure, 18 C.F.R. § 385.2010.

/s/ Ashley Leung
Ashley Leung

Dated at Washington DC, this 12th day of November, 2019.