



FERC Order 2222


Request for Additional Information Review



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June 20, 2022
DIRS



PJM was granted an extension to respond by **July 7, 2022**




Date	RFI Response Plan
<i>May 31</i>	<i>Review RFI with DIRS and solicit feedback</i>
<i>May 31- June 14</i>	<i>Request stakeholders provide written feedback to PJM on RFI</i> <ul style="list-style-type: none"> • PJM received feedback from 5 stakeholder/groups for review
June 20	Additional RFI response review
July 1	Post after-meeting update to reflect feedback from 6/20 DIRS and any material change to PJM’s response, if needed.
July 7	File RFI response with FERC

PJM’s RFI response will add additional detail and clarification to the compliance filing but *will not change* the market design solution that was developed with the DIRS and submitted to FERC on Feb 1, 2022.




Area of Question(s)	General PJM response
Small Utility Opt-In 	PJM's current processes for Opt-in/out for Demand Response are effective. The DERA model will use the same processes. EDCs will be asked to provide evidence from the RERRA for applicable participation regulations/ordinances
Demand Response Opt-Out	
Participation Model	DERA model is <i>in addition</i> to other models (DR, ESR, Gen, EE, etc.)
Cost Development	<ul style="list-style-type: none"> • Demand Response does not have documented cost-based offer energy rules documented in Manual 15. • \$0 cost offers and Manual 15 Section 1.8 is available to all resources to document costs to PJM and IMM. • PJM CDS is an avenue that can be used to document cost development rules
Capacity Participation Rules	Component DERs co-located with retail load will not be subject to capacity mitigation rules.
Capability/Deliverability	DERA will not go through the PJM queue or receive CIRS. The Component DERs will interconnect under local and state laws and the distribution utility will be responsible for studies on reliability. The DER Aggregation Resource's available capability for Capacity participation will be evaluated in the registration process.

Area of Question(s)	General PJM response
Ancillary Service Participation 	<ul style="list-style-type: none"> Ancillary Service only participation is available to DER Aggregation Resources, there are no specific or different rules for this participation. DER Aggregation Resources will not be used for voltage support participation in PJM. The DER Aggregation Resource is qualified to provide A/S, not the individual Component DER.
Order 745 Settlements	Upholding FO745 settlements for Demand Response resource in a DER Aggregation
Role of EDC 	EDC will perform reliability studies for DER Aggregations through the PJM registration utility review process, criteria for reliability concerns will be within the EDC and RERRA purview, dependent on their unique system topology.
Max MW for Component DERs	5MW Component DER threshold. No exception for non-injecting resources.
Locational Requirements	<ul style="list-style-type: none"> Nodal aggregation for energy, multi-nodal aggregation for Capacity and A/S only resources. Multi-nodal aggregations are limited to EDC boundaries to manage the practical limitations and complexities of necessary utility reliability review(s) across multiple EDCs (and potentially RERRAs).

Area of Question(s)	General PJM response
Bidding Parameters	Operating and bidding parameters will be aligned with existing, available parameters for PJM resources- by technology type.
Information and Data Exchange 	<ul style="list-style-type: none"> Physical and Electrical locational data will be coordinated in pre-registration to be able to map the Component DERs to PJM pnodes. Data needed beyond what is supplied for PJM transmission and planning purposes will follow the process in PJM M14B Section 1.5.4 PJM will request settlement data for DER Aggregation Resources consistent with DR settlement rules. DER Aggregation resources will be settled in aggregate. Individual data will be use to properly settle the different resource types (DR, gen) within the aggregation.
Metering and Telemetry 	<ul style="list-style-type: none"> DER Aggregator is the responsible entity for metering and telemetry requirements. Utility meters are acceptable to be used to satisfy the PJM requirements. DER Aggregators will also need to satisfy any local requirements utilities or RERRAs may have on metering or telemetry for Component DERs. Sub-metering, generally, is not permitted. There may be few exceptions (for regulation) that will be detailed in PJM Manuals.

Area of Question(s)	General PJM response
Participation of resources at net metering sites 	<ul style="list-style-type: none"> • Evaluation of net-metering participation will be performed at the site level. Co-located resources at a net-metering site would be evaluated under the net-metering provision in PJM tariff. • EDCs will perform the role of determining if a Component DER is participating in a NEM tariff and provide evidence on what service(s) the Component DER is being compensated for under the NEM tariff. PJM will ensure no double counting (retail/wholesale<>wholesale) and ability to meet market participation rules.
Definition of the ‘electric distribution company’ 	<ul style="list-style-type: none"> • EDC under the DR model is akin to Electric Distributor in the PJM OA. • PJM recognizes that the EDC definition under FO2222 may need stakeholder discussion for modification.
Coordination efforts 	<ul style="list-style-type: none"> • A “DER Hub” software system will facilitate coordination efforts between utilities, aggregators, and PJM. • Communication and data exchange will take place between all parties in the software system for transparency on the process and information being provided.



Area of Question(s)	General PJM response
Registration process 	<ul style="list-style-type: none"> • Pre-registration should be coordinated process between the EDC and aggregator; any disputes would be brought to the applicable RERRA or FERC. • EDC's have deference for approve/deny aggregations based on reliability studies. PJM will review and approve/deny aggregations based on remaining participation information.
Operational Coordination 	<ul style="list-style-type: none"> • Utilizing the communication frameworks built in the DIRS for communication and coordination, allowing for flexibility with designated dispatch and market agents. • Updates to operating ranges need to be provide to PJM via operating parameters in Markets Gateway.
Modification of Resources 	<p>Component DERs will need to go through a pre-registration process for locational information. This is for the individual resources, the entire aggregation will not be subject to the pre-registration activites.</p>
Effective Date	<p>Proposed effective date for Planned DER in the Capacity Market is narrowly allowing Aggregators to participate in Forward Auctions. There will be no operational capability effective at this time and will not result in double counting.</p>

VIII. Coordination between the RTO/ISO, Aggregator, and Distribution Utility, A, 4.

- Questions around the '60-day clock'
 - *a. Please explain whether there are any circumstances that would extend the 60-day distribution utility review period and forestall the automatic approval of a DER Aggregator's registration if the electric distribution company does not provide comments or a recommendation.*
 - *b. Could the 60-day review period be paused by mutual consent of the electric distribution utility and the DER Aggregator to bilaterally resolve a concern?*
 - *c. Could a distribution utility unilaterally request an extension of the 60-day review period to complete its review? If so, please explain what criteria would be used to evaluate such a request.*
 - *d. Please explain whether entry in formal dispute resolution procedures described in Operating Agreement, Schedule 5 would pause the 60-day review window and forestall the automatic approval of a DER Aggregator's registration.*
- PJM is proposing to deny any registration that has data issue, reliability concerns, or ongoing disputes. Following resolution of the concerns, aggregators will be able to re-register the DER aggregation.
 - Existing process that works well in Demand Response Operations today, cleaner tracking of registration.
 - 60 day review is a ceiling timeline and a number of reviews may go faster if an aggregator needs to re-register.

Appendix – Slides from May 31, 2022 DIRS

- *Please explain the criteria, including any specific metrics, by which the electric distribution companies would determine whether the participation of each Component DER in the PJM energy, capacity, and/or ancillary service markets will pose a threat to the reliable and safe operation of the distribution system, the public, or electric distribution system company personnel.*
- *What is the process (including protocols or communications) that an electric distribution company will follow to notify a DER Aggregator of any specific concerns?*

- *Please identify and explain the specific physical and electrical location information that a DER Aggregator must obtain and verify.*
- *Please explain whether entry in formal dispute resolution procedures described in Operating Agreement, Schedule 5 would pause the 60-day review window and forestall the automatic approval of a DER Aggregator's registration.*

- *Please explain in greater detail the roles of the electric distribution company and the Office of the Interconnection in deciding whether a resource can participate in both retail net energy metering and the energy market or capacity market.*

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