



EDC Coordination Workshop Order 2222

January 7, 2021
DIRS

Workshop(s) are intended to be focused discussions around the technical details needed for the utility review process and operational coordination to support the integration of Distributed Energy Resource Aggregations.

During the meeting, please do your best to observe the following ground rules:

1. Open discussion should be mainly driven by PJM and EDC technical staff. While all are welcome to contribute, non-PJM and non-utility staff are asked to be mindful of their commentary time during the meeting.
2. Discussion and comments should focus on the technical challenges and barriers to DER aggregation implementation. Conversation focused on policy positioning or matters less relevant to the safe and reliable operation of the distribution system will be tabled for the broader Order 2222 discussion later in the meeting.
3. To the extent possible, please use the WebEx chat feature to put yourself in the speaking queue.

- January 7th – 9:15am – 11:30am*
- January 19th – 2:30pm – 4:30pm
- February 3rd – 9:15am – 11:30am*
- February 12th 1:00pm – 3:00pm
- March 3rd – 9:15am – 11:30am*
- March 15th – 9:00am – 11:00am

* First portion of the regular monthly DIRS meeting

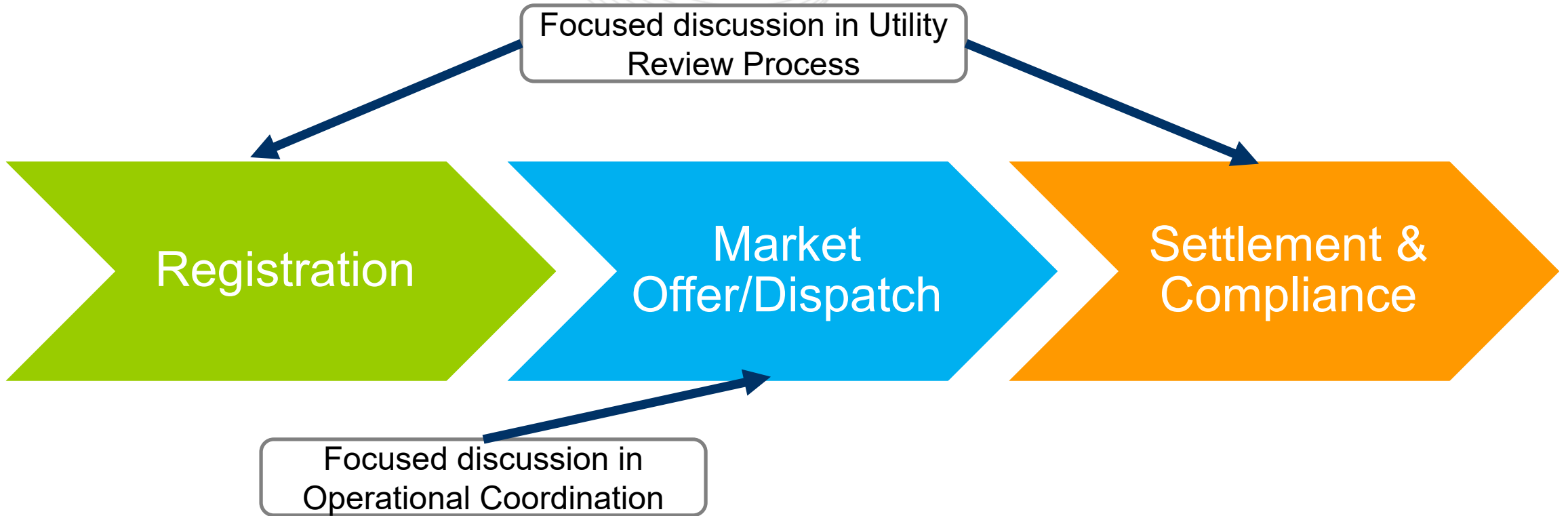
Ensuring the safety and reliability of the transmission and distribution systems.

- Utility Review

- Define a distribution utility review process
- Study/interconnection process
- Review for DERA participation
 - Will not pose any risk to reliability or operation of the distribution system
 - Has properly interconnected with the utility
 - Will not be providing “double counted” services
 - Is not in a “small utility”, and if so has opt-in.
- Timeline for review process
- Dispute Resolution

- Operational Coordination

- Ongoing coordination for data flows
- Dispatch override for reliability



Question: Can EDCs provide support in mapping individual DERs to transmission nodes in the PJM system? What are the barriers to doing so?

Question: Can EDCs confirm retail account numbers and cross-reference them with participation in retail programs (e.g., net metering) during the registration and utility review process?

- For both behind the meter and front the meter resources on distribution.

Question: In addition to the utility interconnection process and agreement, is there additional review criteria required for the EDCs to determine if it is safe and reliable for DERs to participate as part of a DERA in PJM?

What information (if any) will EDCs need from PJM or the aggregator to perform these reviews?

Question: What should be the timeline for utility review?

- The Order requires a timeline of no greater than 60 days.
- Expectations are that the utility review will include all registration activities, any necessary reliability studies, and real-time coordination setup.
- This timeline *will not* include the state interconnection process.



Wholesale market participation by DR may be impacted by Relevant Electric Retail Regulatory Authority (RERRA) Restrictions

- Implement RERRA restrictions or qualifications to market participation
 - EDC provides RERRA evidence
- If EDC is large (>4 million MWh) then DR may participate in wholesale markets unless there is RERRA evidence that prohibits or qualifies participation.
 - Opt Out – no action by RERRA means **DR may participate**
- If EDC is small (= \leq 4 million MWh) then DR may not participate in wholesale markets unless there is RERRA evidence that allows participation.
 - Opt In – no action by RERRA means **DR and DER may not participate**
 - Municipalities and cooperatives typically fit in this category

Reference:

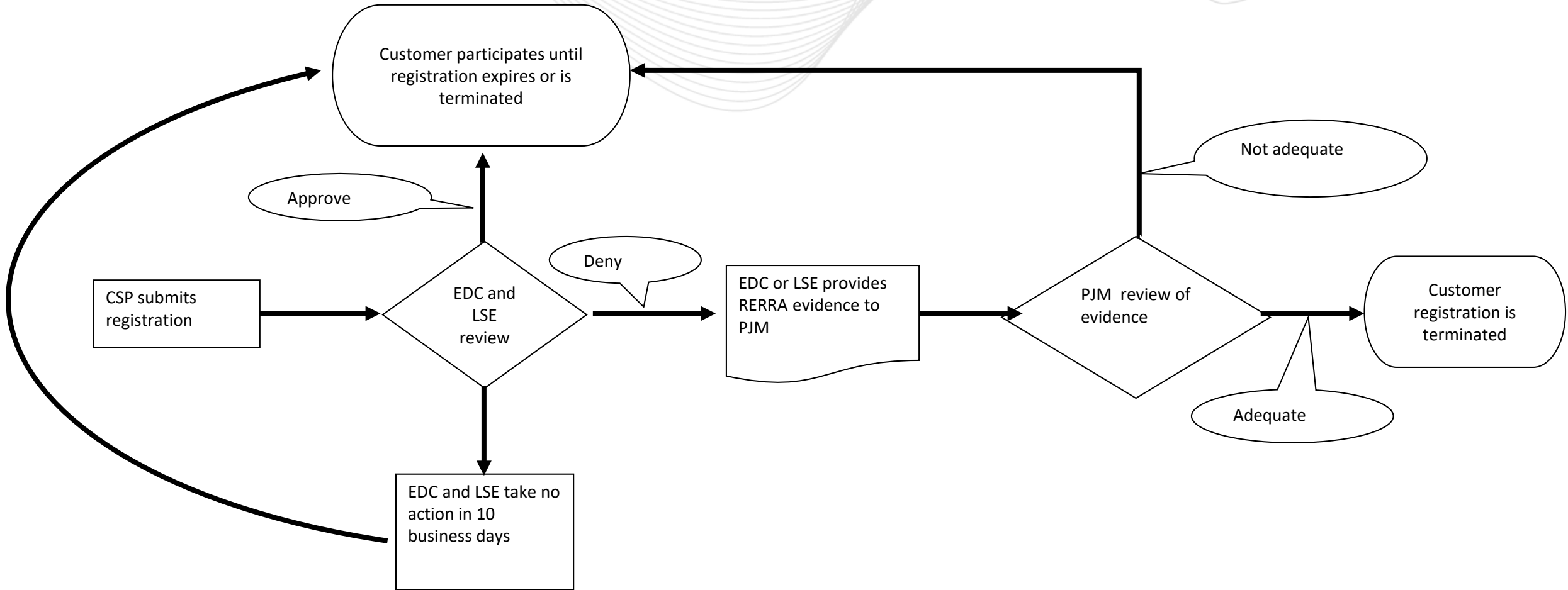
EDCs by Zone by State by RERRA Size:

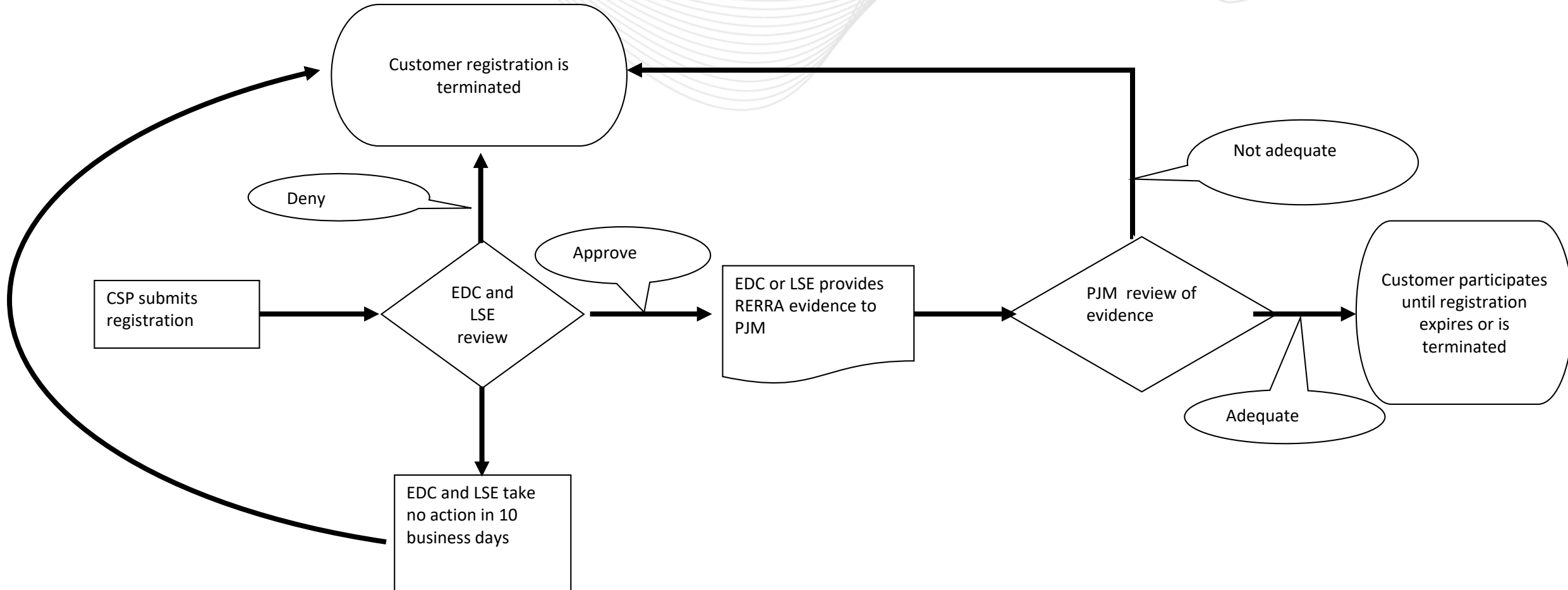
<https://www.pjm.com/-/media/etools/dr-hub/elrs-large-and-small-edcs.ashx?la=en>

RERRAs that Prohibit, Permit or Condition Retail Participation in PJM

Demand Response Programs:

<https://www.pjm.com/-/media/etools/dr-hub/opt-in-opt-out-rerra-evidence-for-dsr.ashx?la=en>

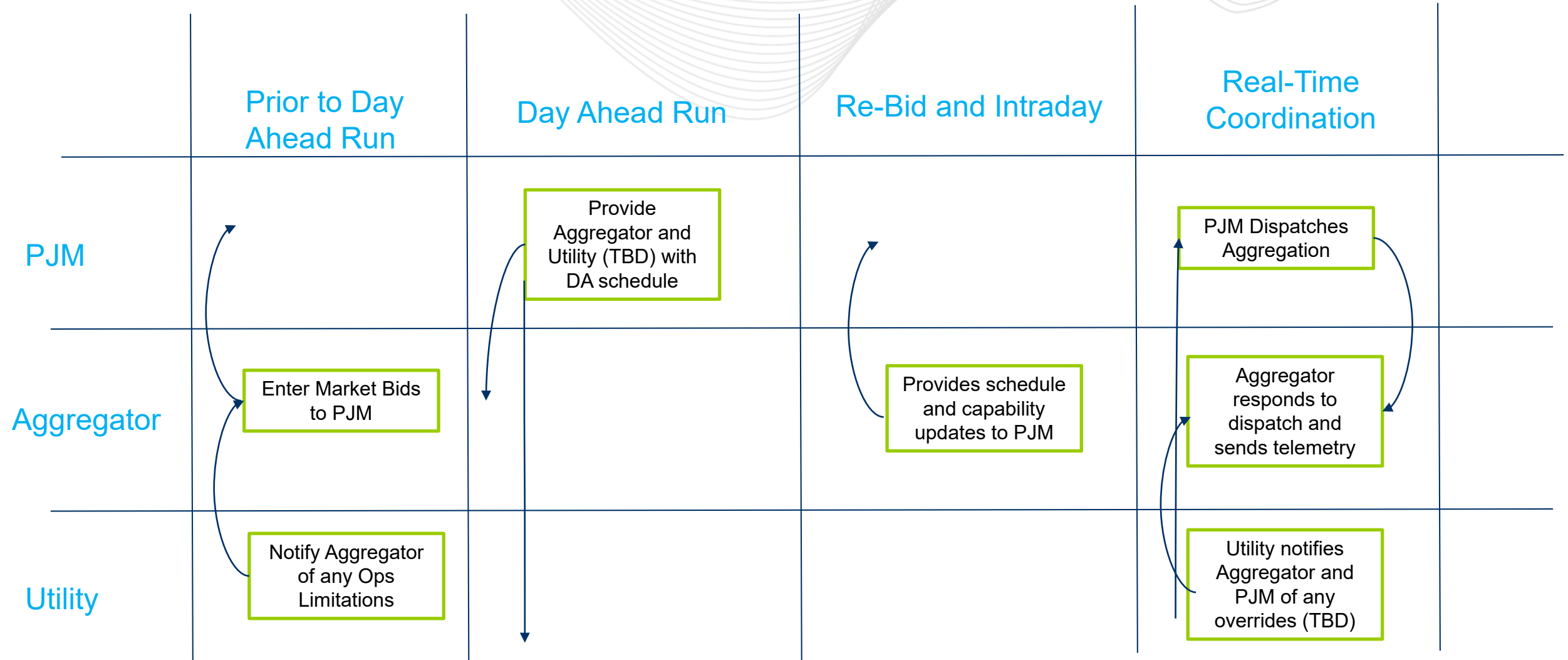




Question: Do EDCs see a need to change the existing process around RERRA evidence and Opt-in (and Out-out for DR) processes? If so, what do you think needs to be updated?

- Specifically referencing the logistics around providing evidence for participation.

Operational Coordination – Communication framework: initial thoughts



Question: Does the communication framework capture all necessary information the utilities and aggregators would need? If not, what additional information is needed?

- Example: Do EDC need to know what market(s) a DERA will be participating in (energy, ancillary services)

Question: Does an EDC need additional override capability with the prior coordination process in Day Ahead? What type of scenarios would necessitate utility override in Real-Time?

- Can specific scenarios be documented ahead of time to allow transparency into these activities?
- Transparency is important due to potential performance penalties for aggregators due to utility override action.

Question: Any specific topics you would like to see covered in the upcoming EDC coordination meetings?

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EDC Coordination on DER Aggregation



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