

Reserve Certainty and Resource Flexibility Incentives

Issue Source

PJM

Issue Content

The work of this group is intended to investigate enhancements in the following areas:

Topic	System Need Timeline
Reserve Resource Performance and Penalty Structure	Immediate
Reserve Offer structure appropriately aligned for resource fuel procurement	Immediate
Reserve deployment	Mid-term
Reserve quantities procurement reflects system needs	Mid-term
Reserve product participation requirements	Mid-term
Incenting Resource flexibility that the system needs	Long term

Proposed Implementation Timeline:

Immediate System Need – in the next year

Mid-Term System Need – in the next 1-3 years

Long Term System Need – in the next 3- 5 years

Key Work Activities and Scope

While the review of the task force will be comprehensive, the solutions for any of the above topics may be advanced to a vote alone or in conjunction with other topics at the members' discretion. Members are advised to use the timeline priorities identified above for guidance on the work plan.

- Given the immediate implementation needs of identified work items, those KWAs will start once the Sr. Task Force commences and worked in an expedited fashion, moving to a vote once proposal packages(s) are developed.

KWA #1: Education and level-setting

- Education on current rules.
- Define a set of design criteria intended to ensure that reserve markets in PJM are functioning in a manner that maximizes performance and provides compensation commensurate with the reliability benefit of the product.

Immediate: KWA #2: Reserve Resource Performance and Penalty Structure

- Provide education on reserve event penalty rules and calculation
- Provide education on current spin event all-call and historic resource performance
- Discuss expected reserve performance requirements and non-performance penalty structure and any reforms that should be considered
- Discuss resource reserve requirements and any impact that could have on reserve compensation, including reserve opportunity cost eligibility
- Develop proposal package(s) for vote, as appropriate, based on the above analysis and findings

Immediate: KWA#3: Reserve Offer structure appropriately aligned for resource fuel procurement

- Review Winter Storm Elliott reserve and natural gas procurement observations
- Review any applicable work of the Electric Gas Coordination Sr. Task Force (EGCSTF)
- Provide education on the current offer structure for Reserves, implemented in October 2022 with Reserve Price Formation
- Provide education on other ISO/RTO activities around recognizing fuel procurement (ISO-NE and ERCOT)
- Explore reforms to compensation for fuel procurement that provide efficient incentives for market sellers committed to provide reserves to be able to perform in real-time
- Explore potential reforms or additional market products, if needed, to support the analysis and findings of the Winter Storm Elliott observations and the work of the EGCSTF
- Develop proposal package(s) for vote, as appropriate, based on the above analysis and findings

Mid-Term: KWA#4: Reserve Deployment

- Provide education on all-call process for reserve deployment
- Review previous Synchronous Reserve Deployment Task Force (SRDTF) work and PJM's IRD FERC filing
- Explore reforms to reserve deployment to support operational and reliability needs
- Develop proposal package(s) for vote, as appropriate, based on the above analysis and findings

Mid-Term: KWA#5 Reserve procurement quantities

- Review material and education on the analysis performed in the Energy Price Formation Sr. Task Force (EPFSTF) in support of Reserve Price Formation with respect to defining PJM's Reserve Requirements
- Provide education on other ISO/RTO's reserve procurement methodologies
- Evaluate the current Reserve Market design to ensure the procurement quantities align with operational needs
- Evaluate the current resource parameters and dispatch flexibility allows for accurate estimated reserve capabilities on resources, at all times
- Explore reforms to PJM reserve requirement definitions and reserve procurement quantities
- Develop proposal package(s) for vote, as appropriate, based on the above analysis and findings

Mid-Term: KWA#6 Reserve product participation requirements

- Provide education on current product participation requirements (example: synchronized reserves must respond within 10 minutes)
- Provide education on other ISO/RTO reserve product participation requirements
- Explore reforms or modifications to reserve product participation requirements (example: develop a duration requirement for reserve products) or any potential new market products to meet determined participation requirements
- Develop proposal package(s) for vote, as appropriate, based on the above analysis and findings

Long-Term: KWA#7: Incenting Resource flexibility that the system needs

- Review PJM's response in FERC Docket No. AD-21-10, Modernizing Electricity Market Design
- Review the results of the PJM/PSU Operational Flexibility Study
- Review PJM's flexibility metrics and discuss flexibility needs indicators
- Provide education on other ISO/RTOs flexibility needs and solutions
- Explore market reforms, including but not limited to multi-interval dispatch, ramping products, and Stochastic Unit Commitment
- Discuss cost allocation of reserves and any potential new market products under discussion

Issue Charge

- Develop proposal package(s) for vote, as appropriate, based on the above analysis and findings

Items not covered in this Issue Charge Scope

Solutions to the above KWA's can include the below topics, however these topics should not be addressed in detail on their own merits, outside of the detailed KWAs in this issue charge. Large efforts in these areas would require a new issue charge

- Revisiting ORDC FERC Filing and Remand, specifically focused on the PJM filing in FERC Docket No. EL19-58
- IT SCED Enhancements, specifically focused on large IT SCED changes outside of addressing the detailed KWAs in this Issue Charge.

Out of Scope

- Changes that minimize PJM Operation's ability to maintain reliability and compliance with NERC Standards.

Expected Deliverables

1. Education and analysis as needed concerning items identified in the scope of work
2. Proposed revisions to PJM's Tariff and the Operating Agreement, resulting in a FERC filing
3. Proposed revisions to PJM Business Practice Manuals.

Decision-Making Method

Tier 1, consensus (unanimity) on a single proposal (preferred default option)

Stakeholder Group Assignment

Create a new Senior Task Force.

Expected Duration of Work Timeline

Start this group in Q4 2023

Start Date	Priority Level	Timing	Meeting Frequency
Click here to enter a date.	<input checked="" type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	<input type="checkbox"/> Immediate <input checked="" type="checkbox"/> Near Term <input type="checkbox"/> Far Term	<input type="checkbox"/> Weekly <input checked="" type="checkbox"/> Monthly <input type="checkbox"/> Quarterly

Charter

(check one box)

<input checked="" type="checkbox"/>	This document will serve as the Charter for a new group created by its approval.
<input type="checkbox"/>	This work will be handled in an existing group with its own Charter (and applicable amendments).

More detail available in M34; Section 6