

Valuing Fuel Security

Includes Problem/Opportunity Statement

Issue Source

PJM, in response to FERC Docket AD18-7-000 (Grid Resilience in Regional Transmission Organizations and Independent System Operators))

Stakeholder Group Assignment

This work will be assigned to a new senior task force reporting to the Markets and Reliability Committee (MRC)

Key Work Activities

This group is expected to:

1. Provide education at a minimum on the following:
 - a. Fuel security study recently completed by PJM
 - b. Work other ISO/RTOs are doing relative to fuel/energy security
 - c. PJM mechanisms and products from both the supply side and demand side that contribute to fuel/energy security
 - d. NERC Assessments that may support this initiative
 - e. The primary risks to fuel/energy security in PJM and the impact and likelihood of such risks.
2. [Quantify via study the probability of occurrence of any scenario that might present a risk of fuel insecurity.](#)
- 2.3. Determine what it means from a PJM system and/or resource level to be fuel/energy secure. This determination should include all aspects of fuel supply characteristics, location of the fuel supply, roles of demand response and demand side management, location and characteristics of non-fuel generation (e.g., renewable and energy storage resources), and other alternative options that can ensure fuel/energy security in the coming years.
- 3.4. Determine whether there is a quantifiable and/or locational requirement for fuel/energy security in PJM.
- 4.5. Identify criteria to guide the selection of design alternatives that should be considered to ensure maintenance of any requirements identified in #2.3 and #3.4 above. Input into the determination of this criteria will include at a minimum the following:
 - a. Impact of existing tools, designs, and operational or planning standards on Fuel/Energy security.
 - b. Results of Phase 1 Fuel Security Analysis
 - c. Timing of fuel/energy security primary risks.
 - d. Triggering mechanisms to implement future design alternatives that are currently not needed but may be needed in the future.

- e. Analysis of any benefits of design alternatives to ensure that they are commensurate with the costs incurred.

6. Analyze and quantify the market responses to any conditions that could lead to fuel insecurity identified in 4 above

7. Assess whether the current market construct is sufficient to cure the energy/fuel insecurity identified in 4 above.

5-8. Where technically feasible, provide stakeholder requested analyses and/or additional scenarios to support discussions, potential plausible future FERC/NERC reliability standards/guidelines, and for evaluating the potential impact of proposals to maintain any identified requirements.

6-9. Determine and compare potential mechanisms, ~~including costs~~, to ensure and value fuel/energy security and their associated costs and benefit to cost ratio in PJM and consider recommendations from relevant studies and assessments that are technically feasible.

Expected Deliverables

As necessary, deliverables include the following:

1. A recommendation to the MRC on whether market or operational changes are needed to ensure current or future fuel/energy security if any are needed.
2. A recommendation to the MRC on proposed market or operational changes that address fuel/energy security
3. Revisions to the Operating Agreement, Open Access Transmission Tariff, and manuals to implement the recommended enhancements if any are needed.

Decision-Making Method

Tier 1 decision making will be used.

Expected Duration of Work Timeline

The activities of the group are expected to begin in April 2019, and be completed by the end of August of 2019~~2020~~. ~~By the end of the 3rd quarter 2019 the group will complete key work activities #1–#3 and expected deliverable #1 and will report to the MRC their recommendations. The remainder of the key work activities and deliverables will be completed by the end of 2019.~~ This will be a high priority issue and will meet a minimum of once per month.