

## 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/resource security.
  - c. PJM mechanisms and products from both the supply side and demand side that contribute to fuel/energy/resource security.
  - d. NERC Assessments that may support this initiative.
  - e. The primary risks to fuel/energy/resource security in PJM and the impact and likelihood of such risks.
2. Quantify the risk of occurrence of selected scenarios that might present a risk of fuel/energy/resource insecurity.
3. Determine what it means from a PJM system and/or resource level to be fuel/energy/resource 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/resource security in the coming years.
4. Determine whether there is a quantifiable and/or locational requirement for fuel/energy/resource security in PJM.
5. Identify criteria to guide the selection of design alternatives that should be considered to ensure maintenance of any requirements identified in #3 and #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/resource security.
  - b. Results of Phase 1 Fuel Security Analysis.

- c. Timing of fuel/energy/resource 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. Consider the market responses to appropriate conditions that could lead to fuel/energy/resource insecurity identified in #4 above.
  7. Assess whether the current market construct is sufficient to cure the energy/fuel/resource insecurity identified in #4 above.
  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.
  9. Determine and compare potential mechanisms to ensure and value fuel/energy/resource security, and their associated costs and benefits 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/resource security.
2. A recommendation to the MRC on proposed market or operational changes that address fuel/energy/resource 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. By the end of the 3<sup>rd</sup> quarter 2019 the group will complete key work activities #1 - #4, 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 deadline to be set by the MRC at the September 2019 meeting. This will be a high priority issue and will meet a minimum of once per month.