



# Fuel & Energy Security Update

Operating Committee  
April 14, 2022

- Fuel & Energy Security Resource Adequacy Assessment Assumptions Updates for 2022
- Updates on related working items in stakeholder process

- Probabilistic “stress test” of most recent five-year ahead Regional Transmission Expansion Plan (RTEP) portfolio using historical cold snap events, considering risks to all resource types.
- General Considerations:
  - Assessment will be conducted during the half quarter of each year after the RTEP portfolio is developed.
  - Inputs updates will include rolling in data on each of the inputs from the previous winter season.

## Inputs

- Winter hourly load shapes derived from historical cold snaps
- Forced outage rates (fuel security-related and random)
- Wind/solar capacity factors
- Generic disruptions of variable impact

## Procedure

- Set impact of generic disruption at X MW
- Calculate conditional LOLE based on each historical cold snap
- Aggregate LOLE values by delivery year
- Calculate average conditional LOLE

## Output

Portfolio's LOLE conditional on the occurrence on a generic disruption of size X MW coincident with a cold snap

- Portfolios
  - 2027/28 RTEP Portfolio
  - Sensitivity with 2027/28 portfolio at the 1 in 10 LOLE requirement
- Load Forecast
  - Weather from historic cold snap scenarios, scaled to be consistent with 2022 PJM load forecast
- Updated Results to be presented at July OC



# Additional Working Items Related to Fuel & Energy Security

Topic	Forum	Status
<b>Summer 2022 Preparedness</b> , including Operations Assessment Task Force study and fuel inventory, emissions run hour and consumable limitation monitoring; related <a href="#">Max Emergency Changes for Resource Limitation Reporting</a>	<a href="#">OC</a>	Ongoing
<b>Reliability risks and drivers considered by the capacity market</b> , including analysis similar to <a href="#">June/July OC updates</a> & <a href="#">Aug MRC update</a>	<a href="#">Resource Adequacy Senior Task Force</a>	Education & Design Components
<b>Procurement metrics and levels to maintain the desired level of reliability</b> , including impacts of seasonal differences		
<b>Qualification requirements and accreditation of capacity resources</b> , including discussion of winterization, dual fuel and seasonal considerations		
<a href="#">Reliability Products &amp; Services Assessment</a>	OC (from RASTF)	Complete & seeking endorsement to send back to RASTF
<b>Operational and market impacts of misalignment between electric and natural gas markets</b>	<a href="#">Electric Gas Coordination Senior Task Force</a>	Education & Design Components
<a href="#">Fuel Requirements for Black Start Resources</a>	OC & MIC	Packages
<a href="#">Renewable Dispatch</a>	<a href="#">OC</a> & Special Sessions	Education & Interest Identification
<b>Generator Deliverability Test Modifications</b> focused on wind and solar resources	<a href="#">PC</a>	PS/IC
<b>PJM Studies on Energy Transition</b>	Periodic Standing Committee Updates	Ongoing
<a href="#">Critical Gas Infrastructure – Demand Response Participation</a>	<a href="#">DRS</a>	PS/IC

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**Fuel / Energy Security Update**



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