

# Fuel & Energy Security Update

Natalie Tacka Furtaw Operating Committee April 13, 2023

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- 1. 2023 Fuel & Energy Security Resource Adequacy Assessment Update
- 2. Updates on related working items in stakeholder process



## 2023 Fuel Security Resource Adequacy Assessment

### Link to 2022 Analysis Results

#### **Key Assumptions for 2023** (results to be presented at next update)

- Probabilistic "stress test" of the 2028/29 Regional Transmission Expansion Plan (RTEP) portfolio and a "1-in-10" portfolio
- The portfolio is analyzed under potential "Cold Snap" events
  - Cold Snap defined as five or more contiguous days where average RTO wind-adjusted temperature in each day is less than 21.5°F
- Three types of thermal/hydro generation unavailability are considered
  - Random Forced Outages
  - Fuel Security (Lack of Fuel) Forced Outages (FS-FO)
  - Generic Disruptions
- For wind and solar, hourly availability profiles are modeled
- RTO-wide results only (ignoring transmission constraints between LDAs)

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## Additional Working Items Related to Fuel & Energy Security

Topic	Forum	Status
<ul> <li>Winter 2022/23 Review &amp; Summer 2023 Preparedness</li> <li>Winter Storm Elliott updates</li> <li>NERC Project 2021-07 Extreme Cold Weather Grid Operations, Preparedness, and Coordination</li> <li>Weekly fuel inventory updates posted on OC page</li> <li>Summer 2023 Operations Assessment Task Force study</li> <li>Environmental regulation implementation coordination</li> </ul>	<u>OC</u>	Ongoing
Reliability risks and drivers considered by the capacity market, including analysis similar to FS-RAA	Resource Adequacy Senior Task Force & Critical Issue Fast Path (for some topics)	Solution Options
Procurement metrics and levels to maintain the desired level of reliability, including impacts of seasonality		
Qualification requirements and accreditation of capacity resources, including discussion of winterization, dual fuel and seasonal considerations		
Reliability Products & Services Assessment	OC (from RASTF)	Complete
Operational and market impacts of misalignment between electric and natural gas markets	Electric Gas Coordination Senior Task Force	Design Components & Solution Options
Fuel Requirements for Black Start Resources	OC/MIC Special Sessions	Complete
Renewable Dispatch	OC & Special Sessions	Package at MRC
PJM Studies on Energy Transition	Workshops & Periodic Standing Committee Updates	Ongoing
Critical Gas Infrastructure: Demand Response Participation	DRS	Complete

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