



# Market Efficiency Update

Nick Dumitriu

PJM Market Simulation

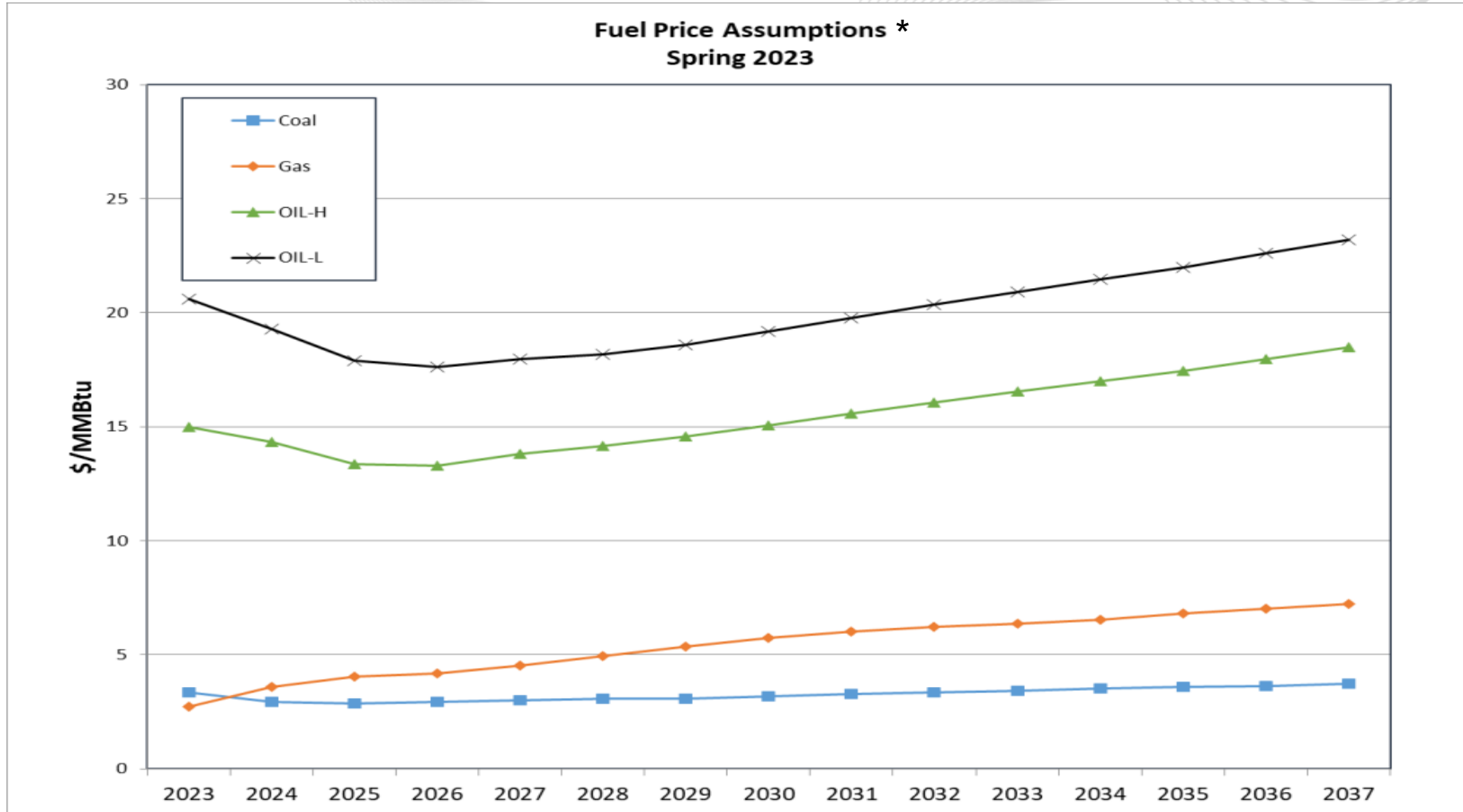
Transmission Expansion Advisory Committee

June 6, 2023



# 2022/23 Market Efficiency Cycle

- Back in January, PJM posted a preliminary ME Base Case:
  - Included the reliability upgrades from the 2022 Window 1 and 2022 Multi-Driver Window.
  - Preliminary case was posted on the [ME secure page](#).
- Assumptions updates since then
  - Generation update presented at May TEAC (cutoff date used for unit status is Jan 24, 2023).
  - Currently in process of updating the preliminary ME Base Case with the following:
    - Fuel forecast (Hitachi Energy Spring 2023).
    - Load forecast (2023 PJM Load Forecast Report).
    - Recent generator deactivations will be modeled if reliability analysis completed and upgrades identified.
- The case will be posted when update completed.



Notes: Coal – Annual average of PJM unit burner-tip prices  
 Gas – Annual average Henry Hub price  
 Oil-H, Oil-L – Annual average prices

\* Provided by Hitachi Energy – May 2023

- The generation expansion provides a comfortable reserve margin even with the higher level of loads from the 2023 PJM Load Forecast Report.
- When using the high 2023 data center load forecast, PROMOD SCED engine has difficulty achieving a reasonable dispatch for the 2030 and 2033 simulations
  - a high number of hours have emergency energy and overloads.
- The extreme levels of PROMOD congestion are an indicator of reliability violations and prevent further evaluation of the congestion patterns.
- Preliminary congestion analysis shows some constraints in ComEd independent of the data center load issue:
  - Enbridge-DeKalb Tap – Waterman 138 kV
  - Haumesser Rd-W DeKalb Tap 138 kV

- PJM delayed the opening of the 2022/2023 Long-Term Window until the reliability violations for the 2022 Window 3 (Dominion) are addressed.
- PJM will continue to monitor the progress and provide additional details to stakeholders at future TEAC meetings.
- Updates to the Market Efficiency Base Case will be posted as necessary.

Facilitator:  
Dave Souder,  
[David.Souder@pjm.com](mailto:David.Souder@pjm.com)

Secretary:  
Tarik Bensala,  
[Tarik Bensala@pjm.com](mailto:Tarik.Bensala@pjm.com)

SME/Presenter:  
Nicolae Dumitriu,  
[Nicolae.Dumitriu@pjm.com](mailto:Nicolae.Dumitriu@pjm.com)

## Market Efficiency Update



### Member Hotline

(610) 666 – 8980

(866) 400 – 8980

[custsvc@pjm.com](mailto:custsvc@pjm.com)

- V1 – 6/1/2023 – Original slides posted



**PROTECT THE  
POWER GRID  
THINK BEFORE  
YOU CLICK!**



Be alert to  
malicious  
phishing emails.

**Report suspicious email activity to PJM.**  
(610) 666-2244 / [it\\_ops\\_ctr\\_shift@pjm.com](mailto:it_ops_ctr_shift@pjm.com)

