



# Market Efficiency Update

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Transmission Expansion Advisory Committee

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# 2020/2021 Long Term Window

- Long-Term Window schedule 2020 - 2021 presented at the June TEAC
  - <https://www.pjm.com/-/media/committees-groups/committees/teac/2020/20200602/20200602-item-02-market-efficiency-update.ashx>
- Market Efficiency input assumptions presented at TEAC meetings June through August
  - 2020 Market Efficiency Analysis Assumptions whitepaper was shared with the PJM board for consideration at the September Board meeting and posted with the October TEAC materials.
- Posting Schedule
  - Preliminary Market Efficiency Base Case was posted on September 4<sup>th</sup> (XML format)
    - XML files compatible with PROMOD 11.3
  - A retooled Market Efficiency Base Case will be posted by the end of October
  - Final Base Case and Congestion Drivers to be posted in December, before start of 2020/21 Long-Term Window

- PJM currently processing the feedback received from stakeholders
- Current model work
  - MISO data update
  - Update topology using the retooled 2025 powerflow from Transmission Planning
  - Update ISA/FSA status
  - Finalize event file
  - Finalize PROMOD setup
- Post retooled base case model (end of October)
- Finalize and post sensitivity cases



# Base Case Preliminary Results - 2025 Simulated Congestion\*

Group**	Correlated Historical Constraints***	Congested Area	Type	Historical 2019 Day Ahead Congestion	Historical 2020 Day Ahead Congestion	Simulated 2025 Area Congestion*
1	Harwood to Susquehanna #1 230 kV	PPL (Susq. Group)	Line	\$ 4,587,972	\$ 16,157,914	Yes
1	Harwood to Susquehanna #2 230 kV		Line	\$ 1,466,849	\$ 3,290,309	
2	Cumberland to Juniata 230 kV	PPL (Juniata group)	Line	\$ 3,516,896	\$ 6,368,984	Yes
2	Dauphin to Juniata 230 kV		Line	\$ -	\$ 472,479	
2	Juniata #1 500/230 kV		XFRM	\$ -	\$ 46,886	
2	Juniata #2 500/230 kV		XFRM	\$ -	\$ 2,836,659	
3	Plymouth Meeting to Whitpain #3 230 kV	PECO	Line	\$ 1,572,531	\$ 3,104,181	Yes
3	Plymouth Meeting to Whitpain #4 230 kV		Line	\$ 938,713	\$ 654,931	
4	Cherry Run to Morgan 138 kV	APS	Line	\$ 883,588	\$ -	Yes
4	Jct. to French's Mill 138 kV		Line	\$ 116,952	\$ 345,506	
4	Gore to Stonewall 138 kV		Line	\$ 818,902	\$ 177,599	
4	Messick Road to Morgan 138 kV		Line	\$ 263,290	\$ -	
4	Messick Road to Ridgeley 138 kV		Line	\$ 1,704,272	\$ 462,027	
5	Kammer North (Bus 1 & 3) to Natrium 138 kV	AEP	Line	\$ 178,984	\$ 36,523	Yes

\*Preliminary results, not final congestion drivers. List of constraints and congested areas may change after the retooling of the base case.

\*\*Table identifies correlated historical constraints with 2025 PROMOD simulated congestion in the same area/group.

\*\*\*M2M constraints not shown (Base Case MISO data update in-progress).

Step	Timeline
Stakeholders Feedback	September 2020
Identify Congestion Drivers	October 2020
2020 Reevaluation Analysis	October – December 2020
2020 Acceleration Analysis	November – December 2020
Post Final Base Case and Target Congestion Drivers	December 2020
Long Term Proposal Window	January 2021 - April 2021
Analysis of Proposed Solutions	May – September 2021
TEAC Reviews and Board Approval	October - December 2021

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## Market Efficiency Update



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- V1 – 9/29/2020 – Original slides posted