

PJM-MISO IPSAC

November 13, 2020







- Update on Interregional Market Efficiency Project
- PJM Regional Process and Criteria
- MISO Regional Process Update
- Annual Issues Review Notice









Update on Interregional Market Efficiency Project







- The PJM Board approved project b3142 (BT-481), the rebuild of Michigan City to Trail Creek to Bosserman138kV lines, December 3, 2019
 - The approval was conditional on MISO approval of same project
- MISO Project (P18585) approved by MISO Board of Directors on September 17, 2020
 - Project approval was pending the approval of MISO regional cost allocation by FERC, which occurred on July 28, 2020
 - Project Status: Under Construction
 - NIPSCO to provide quarterly status reports consistent with MISO Tariff requirements, which will be posted here





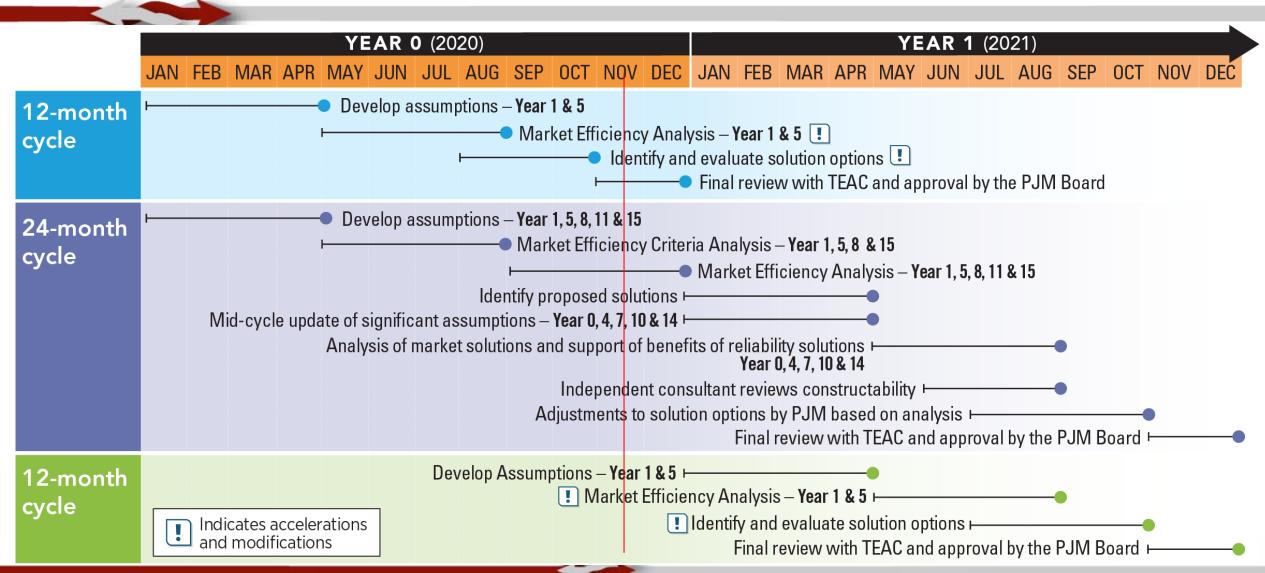


PJM Regional Process and Criteria





Market Efficiency Timeline







PJM 2020/21 Long-Term Window Overview



- Market Efficiency Input Assumptions presented at TEAC meetings June through August
 - 20/21 Market Efficiency Analysis Assumptions <u>whitepaper</u> was shared with the PJM board for consideration at the September Board meeting and posted with the October TEAC materials
- Market Efficiency Training, available <u>here</u> completed October 20th
- Long-Term Window Materials Posting Schedule
 - Retooled PROMOD model to be posted during the month of November (XML format)
 - XML files compatible with PROMOD 11.3
 - ME Window Congestion Drivers, ME Window Base Case, and Sensitivity scenarios to be posted in December, before start of 20/21 Long-Term Window





PJM 2020/21 Base Case – Status Update



- Retooled model includes (to-be posted during November)
 - MISO data update
 - Updated PJM Generation Expansion (ISA/FSA status, retirements)
 - Updated topology using the retooled 2025 powerflow from Transmission Planning
 - Also updated PJM line ratings and contingency definitions
 - ABB-Hitachi PROMOD data updates (heat rates, generator outages)
 - Updated PROMOD setup
- Final sensitivity cases to-be posted during November





PJM Base Case Updated Preliminary Results - 2025 Simulated Congestion*

Group**	Correlated Historical Constraints***	Congested Area	Туре	torical 2019 Day ead Congestion	torical 2020 Day lead Congestion	Simulated 2025 Area Congestion*
1	Harwood to Susquehanna #1 230 kV	PPL	Line	\$ 4,587,972	\$ 16,157,914	Yes
1	Harwood to Susquehanna #2 230 kV	(Susq. Group)	Line	\$ 1,466,849	\$ 3,290,309	1E3
2	Cumberland to Juniata 230 kV		Line	\$ 3,516,896	\$ 6,368,984	
2	Dauphin to Juniata 230 kV	PPL	Line	\$ -	\$ 472,479	Yes
2	Juniata #1 500/230 kV	(Juniata group)	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	PLCO	Line	\$ 938,713	\$ 654,931	163
4	Cherry Run to Morgan 138 kV		Line	\$ 883,588	\$ -	
4	Jct. to French's Mill 138 kV		Line	\$ 116,952	\$ 345,506	
4	Gore to Stonewall 138 kV	APS	Line	\$ 818,902	\$ 177,599	Yes
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
6	Quad Cities to Rock Creek 345 kV	CE-ALTW	M2M	\$ 896,048	\$ 427,688	Yes
7	Muskingum River to Beverly 345 kV	AEP	Line	\$ -	\$ -	Yes
8	Muskingum River to Waterford 345 kV	AEP	Line	\$ -	\$ -	Yes

^{*}Preliminary results, not final congestion drivers. List of constraints and congested areas may change in the final base case.

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







In determining eligible congestion drivers PJM considers

- All binding flowgates internal to the PJM footprint (including tie lines)
- Current active Market-to-Market flowgates (NERC book of flowgates)
- Potential future Market-to-Market flowgates between PJM and MISO

Eligible congestion drivers

- Selected to focus proposals on significant issues
- Identified coincident with the opening of market efficiency proposal window

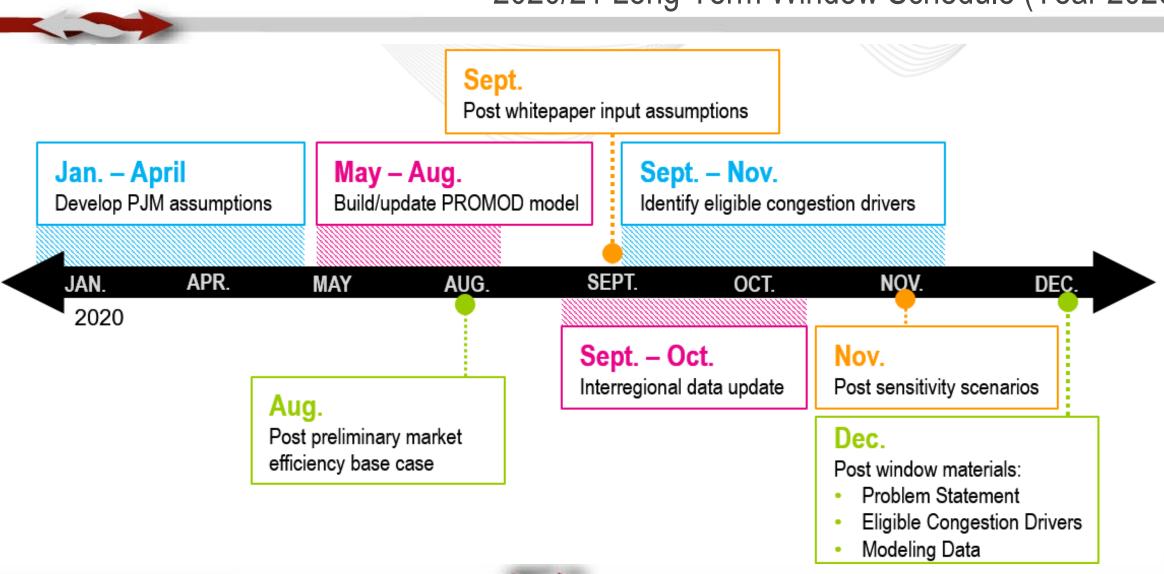
Proposals must address at least one identified congestion driver

 If the proposal does not substantially address an identified congestion driver, or is otherwise substantially deficient or is seriously flawed, it will be rejected and the proposer will be notified





2020/21 Long-Term Window Schedule (Year 2020)







2020/21 Long-Term Window Schedule (Year 2021)



Jan. - April

- Open long-term window
- Mid-cycle update

May - Sept.

Analysis of proposed solutions

Oct. - Nov.

TEAC Reviews: first and second reads

JAN. APR. 2021

MAY AUG. SEPT.

OCT.

NOV.

DEC.

June - Aug.

Independent cost/ constructability review

Dec.

PJM Board approval of selected solutions





PJM Market Efficiency RTEP Window Registration



- Per PJM MISO JOA, Interregional Proposals must be submitted to both PJM and MISO Regional Windows
- Register for the 2020/21 RTEP Market Efficiency Window at http://www.pjm.com/planning/competitive-planning-process.aspx
 - In the CEII Request form write "Access to the 2020-21 Long Term RTEP Window" as the description of the information requested.
 - Register for the PJM Competitive Planner Tool
- Everyone must register to access the data regardless of prior participation in the PJM Competitive Process.
- Long-Term Market Efficiency Window opens January 2021







MISO Regional Process Status Update





MISO Economic Futures and Model Development



- MISO future resource expansion and siting process completed in early November
 - Details presented at MISO <u>November 11 PAC</u>
- MTEP21 economic models are under development
 - Expected completion in Q1 2021
- No regional Market Congestion Planning Study (MCPS) scheduled for MTEP21
 - MISO will use MTEP21 models to determine top congestion issues for the PJM seam







Notice of Annual Issues Review





Annual Issues Review Process (JOA §9.3.7.2)



- In the 4th quarter, RTOs exchange planning information (to be completed in December 2020):
 - Regional issues and newly approved projects near the seam
 - New regional issues
 - M2M historical congestion
- RTOs to jointly review above in February 2021
- Receive Third Party issues in first quarter, but no less than 30 days before Issues Review IPSAC
- Issues Review IPSAC
 - Held in the first quarter of each year
 - Must provide 60 calendar day notice of scheduled date
 - Stakeholder feedback due 30 days prior to IPSAC
- Within 45 calendar days after the Issues Review IPSAC the JRPC shall determine the need for a Coordinated System Plan study
- JRPC notifies the IPSAC of its decision within 5 business days





Coordinated System Plan



Annual Issues Review (including stakeholder feedback) provides basis for JRPC to determine Coordinated System Plan (CSP) study needs

CSP studies could include:

- Interregional Market Efficiency Project (IMEP)
- Targeted Market Efficiency Project (TMEP)
- Interregional Reliability Project (IRP)
- Public Policy
- Ad Hoc studies







- The 2021 Annual Issues Review IPSAC meeting is scheduled for February 26,
 2021
- MISO and PJM will review and solicit stakeholder feedback at the meeting
 - Regional issues & solutions
 - 3rd party issues
- Issues and plans will be/have been discussed at regional meetings
 - PJM issues presented at <u>TEAC meetings</u>
 - MISO issues presented at <u>Subregional Planning Meetings</u> (SPMs)







- 3rd parties may submit input to the Annual Issues Review process
- MISO and PJM will send an email request to their respective planning distribution lists, or you may contact the email addresses below
- Feedback is required by COB January 27, 2021 (30 days prior to IPSAC meeting) to both MISO and PJM
 - PJM: <u>inter.regional.planning.team@pjm.com</u>
 - MISO: <u>EP@misoenergy.org</u>







- Stakeholder input due: January 27, 2021
- Annual Issues Review IPSAC: February 26, 2021
- JRPC notifies IPSAC of CSP study determination: April 12, 2021 (at latest)







Open Discussion







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- Jarred Milandjmiland@misoenergy.org
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