

Market Efficiency Update

Nick Dumitriu

Market Simulation

Transmission Expansion Advisory Committee

February 9, 2021

2020/21 Long Term Window

Long-Term Market Efficiency Window (120 days)

2020/21 Long-Term Window started January 11, 2021 and will close May 11, 2021

Window process and registration presented at the [Special TEAC – Market Efficiency](#) on December 23rd, 2020

Problem statement and target congestion drivers posted on [Competitive Planning Process](#) page

- Market Efficiency Economic Models posted on the [Market Efficiency Secure Page](#)
- Modeling data includes market efficiency base case files for all study years, PROMOD input files and benchmark test cases and results.
- To access the information, stakeholders required to have CEII confirmation (for both PJM and MISO) and PROMOD vendor (ABB) confirmation.



Posted Congestion Drivers

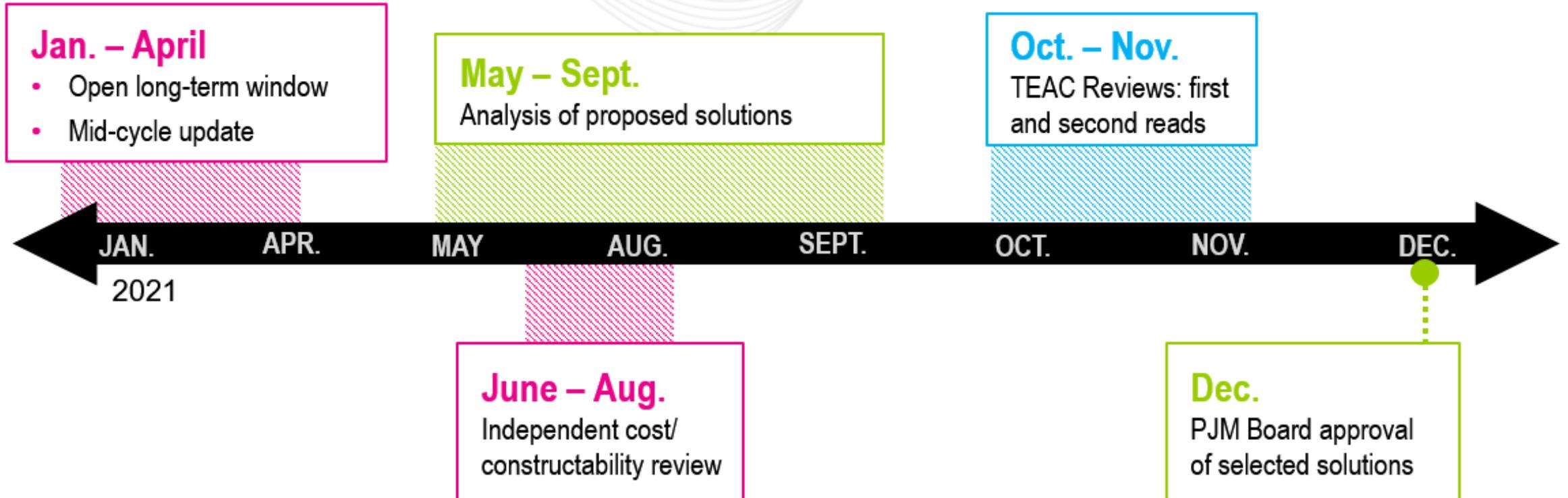
2020/21 RTEP Market Efficiency Window Eligible Energy Market Congestion Drivers (Posted 01-11-2021)				ME Base Case (Annual Congestion \$million)		ME Base Case (Hours Binding)		Is Line Conductor Limited?	Conductor Ratings*	Comment
FG#	Constraint	FROM AREA	TO AREA	2025 Simulated Year	2028 Simulated Year	2025 Simulated Year	2028 Simulated Year			
ME-1	Kammer North to Natrium 138 kV	AEP	AEP	\$ 2.60	\$ 13.19	102	244	Yes		Internal Flowgate
ME-2	Muskingum River to Beverly 345 kV**	AEP	AEP	\$ 1.00	\$ 2.21	113	187	Yes		Internal Flowgate
ME-3	Junction to French's Mill 138 kV	APS	APS	\$ 18.45	\$ 25.88	510	634	No	SN/SE=221/268 MVA WN/WE=250/317 MVA	Internal Flowgate
ME-4	Yukon to AA2-161 Tap 138 kV	APS	APS	\$ 4.30	\$ 5.37	1740	2059	Yes		Internal Flowgate
ME-5	Charlottesville to Proffit Rd Del Pt 230 kV	DOM	DOM	\$ 3.93	\$ 4.21	129	115	Yes		Internal Flowgate
ME-6	Plymouth Meeting to Whitpain 230 kV	PECO	PECO	\$ 5.44	\$ 7.27	154	153	No	SN/SE=463/578 MVA WN/WE=521/639 MVA	Internal Flowgate
ME-7	Cumberland to Juniata 230 kV***	PLGRP	PLGRP	\$ 8.70	\$ 9.07	233	216	Yes		Internal Flowgate
ME-8	Harwood to Susquehanna 230 kV***	PLGRP	PLGRP	\$ 16.73	\$ 12.40	949	723	Yes		Internal Flowgate
ME-9	Duff to Francisco 345 kV	DUK-IN	DUK-IN	\$ 0.96	\$ 3.82	81	125	No	SN/SE=1374/1374 MVA WN/WE=1798/1798 MVA	M2M
ME-10	Gibson to Francisco 345 kV	DUK-IN	DUK-IN	\$ 4.28	\$ 3.71	198	211	Yes		M2M

Notes:

* Conductor ratings provided by TOs for congestion drivers that are limited by station equipment.

** A sag study being performed by the TO may decrease or eliminate the Muskingum River to Beverly 345 kV congestion driver.

*** Cumberland – Juniata and Harwood – Susquehanna Congestion drivers may be impacted by DLR (Dynamic Link Rating) projects (Expected in-service date 06/01/2021).
Harwood – Susquehanna driver may be impacted by recently announced Talen Energy retirements. (Retirement notice not submitted to PJM).





Appendix A

2020/21 Long-Term Window Registration Process

Beginning July 2020, all RTEP competitive proposals are submitted through a new web-based Competitive Planner application.

Beginning in July 2020, all RTEP competitive proposals will be submitted through a new web based Competitive Planner application. Only transmission owners and developers who have received authorization to receive CEII information associated with the current window will be able to participate in the PJM competitive planning process.

[Request Access to Competitive Planner](#) 

Only transmission owners and developers who have received authorization to receive CEII information associated with the current window will be able to participate in the PJM competitive planning process.

- **Register** for the 2020/21 RTEP Market Efficiency Window at PJM.com > Planning > [Competitive Planning Process](#)
- In the CEII Request form write “**Access to the 2020/21 Long Term RTEP Window**” as the description of the information requested.
- All participants must register to access the data regardless of prior participation in the PJM Competitive Process.

The screenshot shows the PJM website's navigation menu with 'planning' selected. The left sidebar lists various services, with 'Competitive Planning Process' highlighted. The main content area features the title 'Competitive Planning Process' and a detailed description of the process, including a 'Resources' section with links to TEAC, pre-qualification status, and Manual 14F. A 'Next Window' section at the bottom highlights the '2020/21 Long-Term Window 1' with 'OPEN' and 'CLOSE' buttons and dates.

Navigation: about pjm | training | committees & groups | **planning** | markets & operations | library

Services & Requests: Home > Planning > Competitive Planning Process

Competitive Planning Process

Competitive Planner makes it easier for transmission owners and transmission developers to submit proposals through PJM's competitive transmission development process windows. It provides an interactive form that allows developers to provide information more easily and accurately, while also securely submitting that information to PJM from a single location.

Previously developers would need to fill out an Excel file that would then be uploaded securely.

PJM will announce in the Transmission Expansion Advisory Committee (TEAC) its intention to solicit competitive solutions to identified planning needs. The "windows" for submitting such solutions fit into three categories and follow the 18-month and 24-month planning cycles as described in Manual 14F.

Pre-Qualified Entities

While not a requirement to propose competitive projects, an entity must obtain Designated Entity status in order to construct, own, operate, maintain, and finance competitive planning projects. If your company hasn't been pre-qualified, [apply for pre-qualification status](#).

Resources

- Transmission Expansion Advisory Committee (TEAC)
- [Apply For Pre-Qualification Status](#)
- [FERC Form 715 - FERC Guidelines For Diagram Requests](#)
- Manual 14F: [Clean](#) [WEB](#) | [Clean](#) [PDF](#)

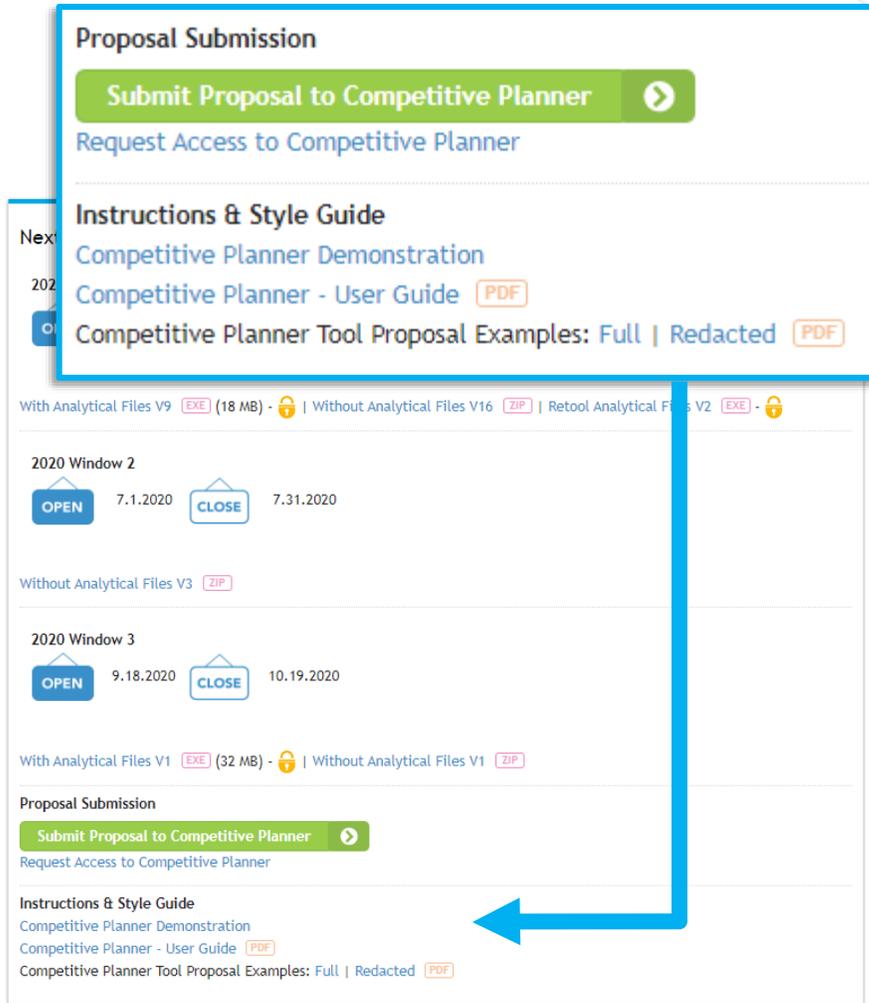
Planning Community

- [Training Video](#) | [User Guide](#) [PDF](#)
- [Register for Community](#)

Next Window [Redacted Public Proposals](#)

2020/21 Long-Term Window 1

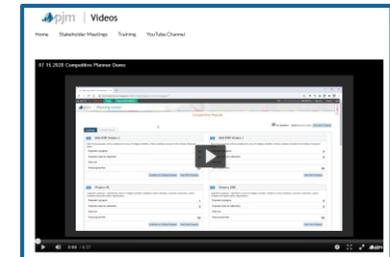
[OPEN](#) 1.11.2021 [CLOSE](#) 5.11.2021



PJM has a Users Guide posted to the PJM website for the new Competitive Planner Tool:
PJM.com > Planning > Competitive Planning Process > [Competitive Planner – User Guide](#)

There is also a demonstration Video posted to the PJM website showing how to use the new Competitive Planner Tool:
Videos.pjm.com > [Competitive Planner Demo](#)

PJM has also posted Examples of Competitive Planer proposals:
PJM.com > PJM.com > Planning > Competitive Planning Process > Competitive Planner Tool Proposal Examples: [Full](#) | [Redacted](#)



Facilitator:
Sue Glatz,
Suzanne.Glatz@pjm.com

Secretary:
Michael Zhang,
Michael.Zhang@pjm.com

SME/Presenter:
Nick Dumitriu,
Nicolae.Dumitriu@pjm.com

Market Efficiency Update



Member Hotline

(610) 666 – 8980

(866) 400 – 8980

custsvc@pjm.com

- V1 – 02/03/2020 – Original slides posted
- V2 – 02/11/2020
 - Slide 4 – added footnote:
*“** A sag study being performed by the TO may decrease or eliminate the Muskingum River to Beverly 345 kV congestion driver.”*