

Manual 14B and 14F Conforming Language

FERC Order Docket No. ER21-162-000

(Market Efficiency Process Enhancement Task Force Phase 3 – Window for Capacity Drivers)

Nick Dumitriu

PJM Market Simulation

Markets & Reliability Committee

May 26, 2021

MEPETF Background & Endorsement Timeline

- **Market Efficiency Process Enhancement Task Force**
 - Address challenges and opportunities for improvements to Market Efficiency process since implementing FERC Order 1000 processes

- **Phases**
 - Phase 1 completed August 2018
 - Phase 2 completed April 2019
 - Phase 3 completed August 2020

- **Phase 3 FERC Order – Window for Capacity Drivers**
 - Two MEPETF packages, B1 and C1, were endorsed at the MRC and MC meetings on 08/20/2020 and 09/17/2020 respectively
 - FERC Order Docket No. ER21-162-000 (issued 2020-12-18)
 - Manual 14B and 14F Conforming Language endorsed at 05/11/2021 PC meeting

- **Package B1 - Capacity Drivers Benefits**
 - Benefits determined using RPM (3 years from current) and RTEP (5 years from current) years
 - Capacity driver proposed solutions expected in service date before June 1 of Delivery Year

- **Package C1 - Window for Capacity Drivers**
 - Separate 60-days RPM Drivers Window following annual BRA
 - RPM drivers that are also Energy drivers will be posted in the Long-Term Window
 - Capacity drivers criteria follow existing OATT Att. DD, Section 15 language

- **2.6 RTEP Market Efficiency Planning**

- Added Reliability Pricing Model constraints to the list of constraints that also have an economic impact.
- 2.6.5 Determination and evaluation of cost / benefit of potential RTEP projects specifically targeted for economic efficiency
 - Added clarification that the Total Annual Enhancement Benefit could consist of an energy market benefit, a Reliability Pricing Model (RPM) benefit, or both if the project addresses both energy market and RPM constraints.
- Split section 2.6.5 Determination of Market Benefits in three subsections to allow insertion of new subsection 2.6.5.2 Determination of Reliability Pricing Model (RPM) Benefits:
 - 2.6.5.1 Determination of Energy Market Benefits (existing language)
 - 2.6.5.2 Determination of Reliability Pricing Model (RPM) Benefits (new subsection)
 - Added language regarding capacity benefits being determined using simulations for RPM and RTEP years.
 - 2.6.5.3 Determination of Benefits/Cost ratio (existing language)

** RPM year is defined as 3 years from current year, and RTEP year is defined as 5 years from current year.*

- **Attachment E: Market Efficiency Analysis Economic Benefit / Cost Ratio Threshold Test**
 - Updated obsolete B/C ratio language to match the OA Schedule 6 section 1.5.7(d) language.

- **Section 1: Proposal Window Overview**
 - 1.1 Proposal Window Type and Duration
 - Added information regarding the window type and duration for RPM economic constraints.

- **Section 8.1: Reliability Criteria Project Evaluation**
 - 8.2.1 Primary Considerations
 - Added clarification that PJM identified congestion drivers may be either energy market congestion or Reliability Pricing Model (RPM) economic constraints.
 - 8.2.1.1 Eligible Energy Market Congestion Drivers
 - Added clarification that this section refers to energy market congestion drivers only.
 - 8.2.1.2 Eligible Reliability Pricing Model (RPM) economic constraints (new subsection)
 - Eligibility criteria for RPM constraints to follow OATT Att. DD, Section 15 (see Appendix B).
 - Added language regarding the expected in-service date for projects that address RPM constraints.
 - Added language regarding when PJM will consider alternative solutions.
 - Renumbered sections 8.2.1.3, 8.2.1.4, 8.2.1.5

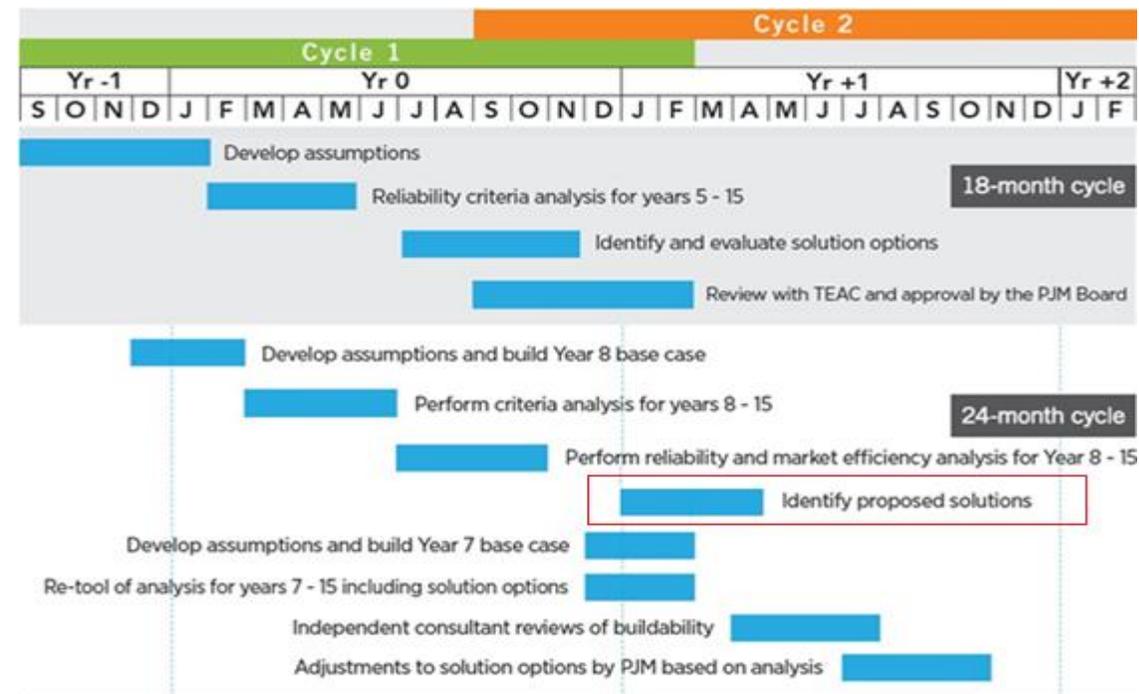
- **Section 1: Proposal Window Overview**

- 1.1 Proposal Window Type and Duration
 - Updated Exhibit 1: 24-Month Reliability Planning Cycle to reflect the start of the long-term proposal window in January.

- **Section 8.1: Reliability Criteria Project Evaluation**

- 8.2.1.4 Benefit/Cost (B/C) clean-up
 - Removed obsolete language conflicting with the OA:

“Consistent with Schedule 6 of the PJM Operating Agreement, a Market Efficiency proposal addressing one or more identified congestion driver must meet a B/C ratio threshold of at least 1.25:1, ~~calculated over the first 15 years of the life of the proposal~~. The B/C ratio is calculated using the procedure described in Manual 14B, section 2.6.5. ”



FERC Order
Issued
December 2020



PC Endorsement
May
2021



MRC Endorsement
June
2021



PC
1st Read
Conforming
Language
Manuals 14B/14F
April 2021

MRC
1st Read
May
2021

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

Manual 14B and 14F Conforming Language
FERC Order Docket No. ER21-162-000
(Market Efficiency Process Enhancement Task Force
Phase 3 – Window for Capacity Drivers)



Member Hotline

(610) 666 – 8980

(866) 400 – 8980

custsvc@pjm.com

A decorative graphic of thin, overlapping grey lines forming a wavy, abstract shape is positioned at the top of the slide, above the main title.

Appendix A

Summary of Manual Sections Implementing the Conforming Language

Design Component	Status Quo	MRC/MC Endorsed Change	Justification	Manual Section Implementing the Conforming Language
Capacity Benefit Calculation Simulation Years	RTEP, RTEP+3 and RTEP+6	RPM and RTEP years	Addresses topology and CETL uncertainties beyond RTEP year	Manual 14B 2.6.5 Determination and evaluation of cost / benefit of potential RTEP projects specifically targeted for economic efficiency
In-Service for RPM Market	No restrictions	To be in service prior to June 1 of the Delivery Year for which the Base Residual Auction is being conducted. In the event a transmission expansion cannot be placed in service by this date, PJM will consider capacity market solutions that can be in service before RTEP year.	Ensure projects address a capacity driver by the RPM year	Manual 14F 8.2.1.2 Eligible Reliability Pricing Model (RPM) economic constraints (new section)

MRC/MC Endorsed Package C1

Separate capacity and energy driver studies

Design Component	Status Quo	MRC/MC Endorsed Change	Justification	Manual Section Implementing the Conforming Language
Cycle Type	24-Month	24-Month for Energy drivers 12-Month for Capacity drivers	Address capacity driver in time for BRA delivery year Existing procedures outline when transmission solutions are appropriate in RPM	Manual 14F 1.1 Proposal Window Type and Duration
Proposal Windows Type and Duration	120-day long-term window for Energy, Capacity and multi-criteria drivers; biennial	120-day biennial window for Energy drivers 60-day annual short-term window for Capacity exclusive and multi-criteria drivers, when needed		Manual 14F 1.1 Proposal Window Type and Duration
Window Timing	January-April of odd years	Energy: January-April of odd years Capacity: Following the annual Base Residual Auction (BRA)		Manual 14F 1.1 Proposal Window Type and Duration
Capacity Driver Criteria	Tied to Eligible Energy Congestion Drivers	Follow existing OATT Att. DD, Section 15 language		Manual 14B 2.6 RTEP Market Efficiency Planning Manual 14F 1.1 Proposal Window Type and Duration 8.2.1 Primary Considerations
Window Timing and Coordination Energy Drivers and Capacity Drivers	N/A	If the same congestion drivers are identified for both Energy and RPM, then the combined benefits will be evaluated during the 24-month process. Latest available ME base case used to evaluate proposals for such multi-criteria drivers.		Manual 14F 1.1 Proposal Window Type and Duration

A decorative graphic of several thin, overlapping, wavy lines in a light gray color is positioned at the top of the slide, above the main title.

Appendix B

Market Efficiency Capacity Drivers Criteria (OATT, Att. DD, Section 15)

OATT, Att. DD, Section 15

Following each Base Residual Auction, the Office of the Interconnection shall review each LDA that has a Locational Price Adder to determine if Planned Generation Capacity Resources, Planned Demand Resources, or Qualifying Transmission Upgrades submitted Sell Offers that cleared in such auction. If a Locational Price Adder results from the clearing of an LDA for two consecutive Base Residual Auctions, and no such planned resources or upgrades clear in such auctions for such LDA, then the Office of the Interconnection shall evaluate in the RTEP process the costs and benefits of a transmission upgrade that would reduce to zero the Locational Price Adder for such LDA.