

Manual 11 Conforming Language: Transmission Constraint Penalty Factors

Vijay Shah Lead Engineer, Real-Time Markets Markets and Reliability Committee April 26, 2023



- System conditions related to the Lanexa-Dunnsville-Northern Neck 230 KV circuit triggered a review of guidelines where the default TCPF can be adjusted
 - FERC accepted PJM's filing to lower the default TCPF for constraints related to the specific outage (effective 2/1/22)
- Stakeholder discussion regarding TCPF were held as part of EPFSTF, beginning in April 2022
- PJM submitted proposal to FERC in January 2023
- FERC accepted PJM filing with effective date of March 21, 2023



Order Impact

TCPF Education – April 2022

- The TCPF is included in the congestion component of the LMP to provide market signals to incentivize supply and/or demand to make short-term or long-term investments to resolve the local scarcity condition caused by a transmission constraint.
 - PJM internal constraints, regardless of voltage level, are defaulted to a \$2,000/MWh transmission constraint penalty factor.
- The Order provides PJM the ability to modify the default TCPF when there is no evidence that a local transmission constraint can be relieved by available generation or load response in the impacted area and such congestion is caused by a transmission upgrade as part of PJM's RTEP process or a transmission upgrade necessitated by a generator interconnection.

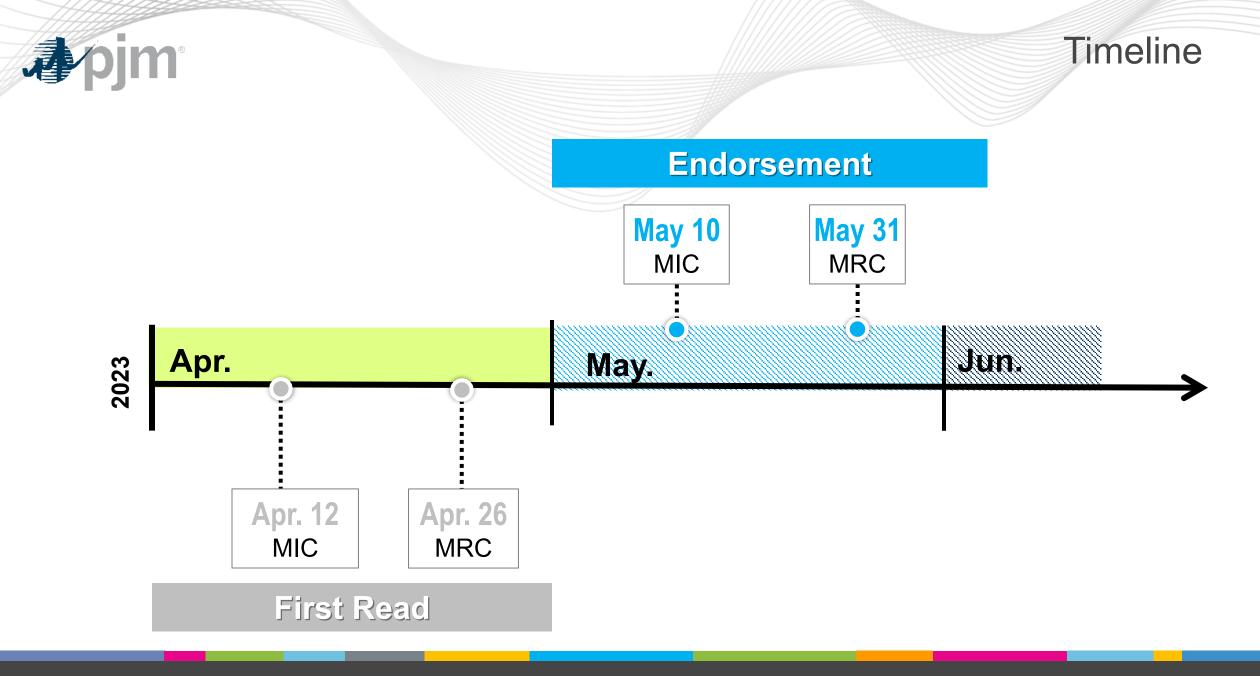
First Read Summary



- Manual 11, Section 2.17
 - Language updated for adjustment to Default TCPF
 - Merged existing guidelines document into M11

PJM can also adjust, for an individual constraint, the default penalty factor or temporarily change the default penalty factor for an individual constraint, in order to reflect system operational needs and the cost of the resources available to effectively relieve congestion on the constraint. PJM may also adjust the default Transmission Constraint Penalty Factor in either Day-Ahead or Real-Time Energy Market if the constraint is caused by a transmission outage associated with a Regional Transmission Expansion Plan (RTEP) or planned transmission upgrade necessitated by interconnection request (s) in the impacted area designed to improve system reliability.

When PJM identifies that the effective cost of controlling actions available to relieve congestion on the constraint is not consistent with the default penalty factor, the penalty factor is increased or decreased as documented in the <u>Transmission Constraint Penalty Factor</u> <u>Adjustment</u> <u>Guidelines</u>.







Presenter: Vijay Shah, Vijay.Shah@pjm.com

Manual 11 Conforming Language for TCPF Adjustment

Member Hotline (610) 666 – 8980 (866) 400 – 8980 custsvc@pjm.com

