

FERC Order 881: Ambient Adjusted Ratings

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AREAS OF REFORM:

Revises
FERC regulations
and *pro forma*
Tariff to incorporate
new *pro forma* OATT
Attachment M

- 1 | Definition of Transmission Line Ratings
- 2 | Ambient-Adjusted Ratings (AAR)
- 3 | Seasonal Line Ratings
- 4 | Exceptions and Alternate Ratings
- 5 | Emergency Ratings
- 6 | Transparency Requirements
- 7 | Dynamic Line Ratings (DLR)

Compliance
Filing Due
July 12, 2022

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Full
Compliance By
July 12, 2025

Centralized

Traditional temp set approach

Distributed

DLR approach for AAR

Hybrid

- Centralized approach for some facilities
- Distributed approach for other facilities

Minimum Requirements

- Next 10 days hourly, minimum
- Seasonal, minimum of 4 periods
- Posted on PJM OASIS; TO methodology posted

Potential Approaches for Consideration

Required End State

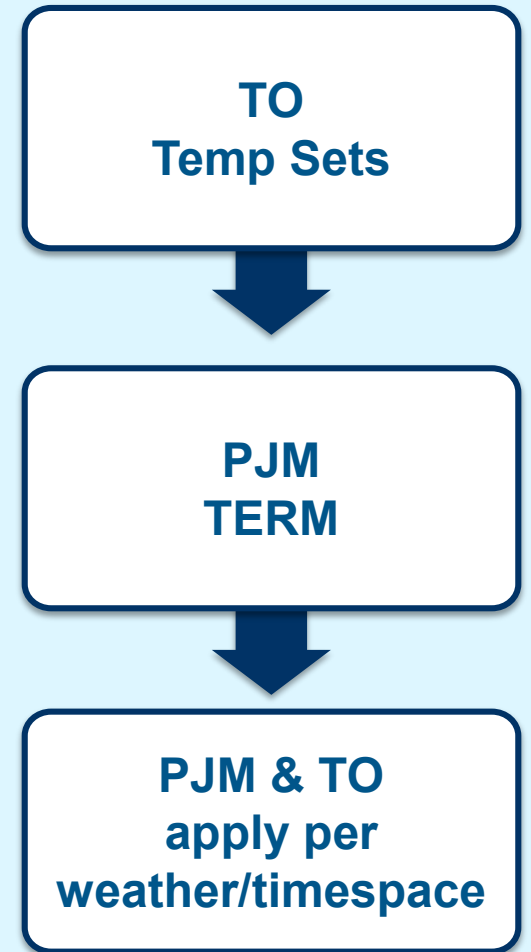
Centralized Temp Sets: Traditional

- PJM determines required temperature set framework.
- PJM equipment owners calculate and submit temperature set data per equipment to PJM.
- PJM sets active temperature set based on the weather conditions.
- Equipment owner queries ratings from their own temperature sets and forecasts.
- PJM and equipment owner compare ratings when evaluating trends and exceedances, and during mitigation for same.

Considerations/ Benefits

- Ensure TP obligations in Order 881 Attachment M do not conflict with TO requirements.
- Deference to DLR, where applicable.
- Familiar practice and minimal change to most facilities.
- PJM evaluation of existing temperature forecasts and alignment with members on application per zone/facility.
- Historic temp sets across the PJM footprint.

Centralized: Traditional



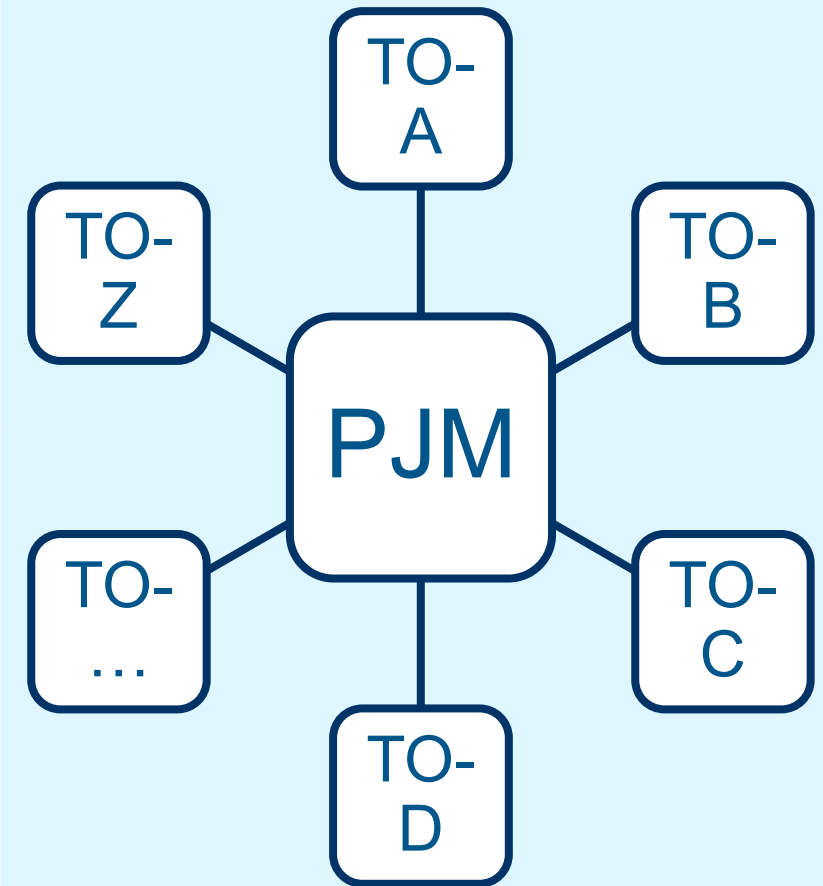
Distributed: DLR-like

- PJM equipment owner determines their applicable temp set range.
- PJM equipment owners calculate and submit seasonal ratings and rolling 10-day hourly ratings.
- PJM uses ratings as appropriate per time horizon of end-use.
- Equipment owner uses ratings per hour where appropriate.
- Equipment owner must notify PJM if in-use rating is inaccurate.

Considerations/ Benefits

- Reduced ambiguity on rating alignment.
- Loss of ICCP strategies become more important.
- Increased volume of ICCP data exchange and more SCADA processing.
- Cut-in data submission timeline might change.
- 10-day requirement and historic temperature set ranges fall squarely upon equipment owner.

Distributed: DLR-like



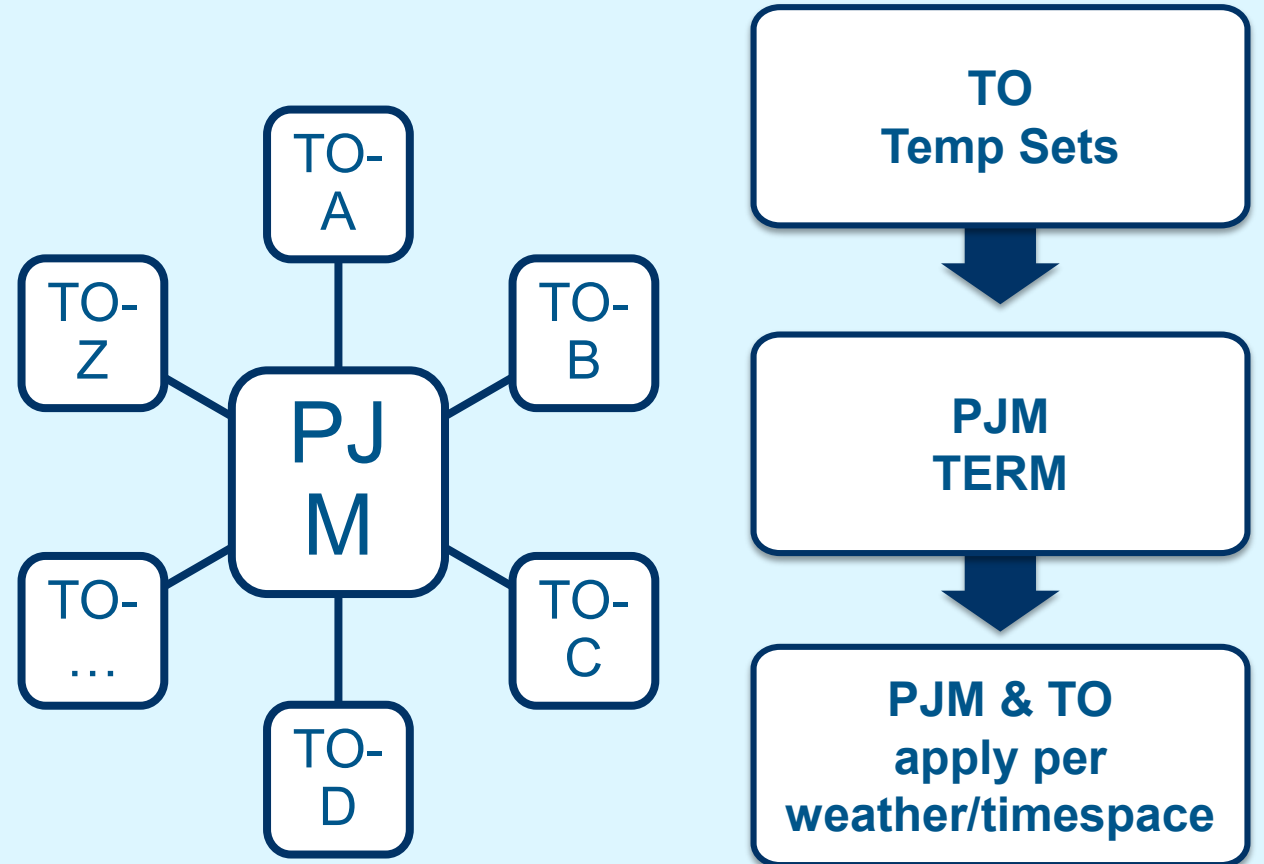
Hybrid: Both Options

Mixed approach

Considerations/Benefits

- Will exist with traditional and DLR-like approach.
- Considerations/benefits of each apply.
- May allow for easier transition to DLR for a given company.
- Owner determines their approach per facility.
- Deadlines for notice of changes to approach.
- Tie line coordination issues might arise if companies use different strategies for each end.

Hybrid: Temp set & DLR-like approach



PJM will be reaching out to our Transmission Owners to get alignment on compliance approach in regard to FERC Order 881. Potential questions below:

[Q1] Does your company seek to directly telemeter one or more real-time facility ratings to PJM? [YES/NO]

TO Comment:

[Q2] For any facilities for which you will seek to directly telemeter real-time facility ratings to PJM, will your company provide rolling 10-day hourly forecasted ratings for each of these facilities to PJM? [YES/NO]

TO Comment:

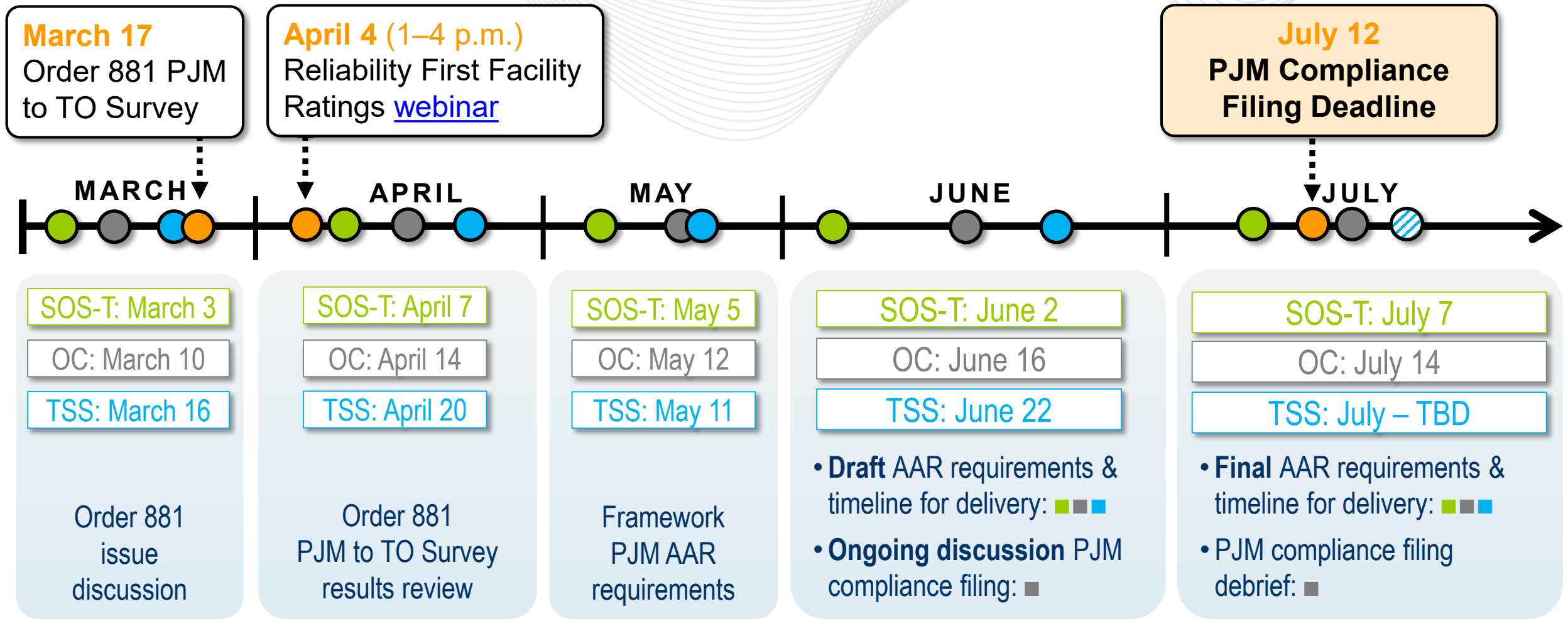
[Q3] Excluding seasonal ratings, for any facilities for which you will seek to directly telemeter real-time facility ratings to PJM, will your company be requiring PJM-derived temperature set frameworks, such as those traditionally provided via TERM, for any facility? [YES/NO]

TO Comment:

[Q4] For any facilities for which you will seek to directly telemeter real-time facility ratings, how will you coordinate your ratings with your neighboring TOs inside and outside of PJM?

TO Comment:

Timeline for PJM Compliance Filing



NOTE: Beyond the above, PJM will collaborate with additional stakeholder bodies such as TOPWG, RSCS, DTS and others as needed to work towards requirements and compliance objectives.

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FERC Order No. 881



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