

FERC Order 881: Ambient Adjusted Ratings

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PJM Operating Committee

April 14, 2022

AREAS OF REFORM:

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

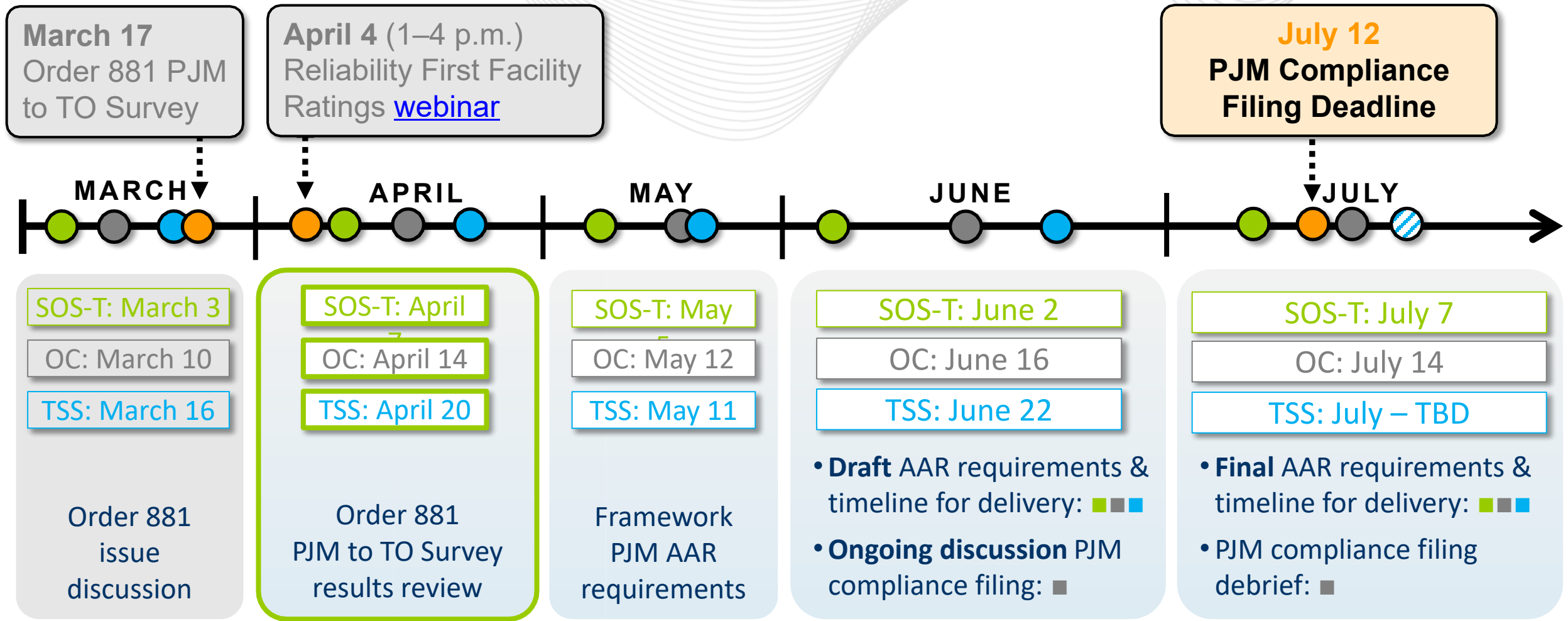
- 1 | Definition of Transmission Line Ratings
- 2 | Ambient-Adjusted Ratings (AAR)
- 3 | Seasonal Line Ratings
- 4 | Exceptions and Alternate Ratings
- 5 | Emergency Ratings
- 6 | Transparency Requirements
- 7 | Dynamic Line Ratings (DLR)

Compliance
Filing Due
July 12, 2022

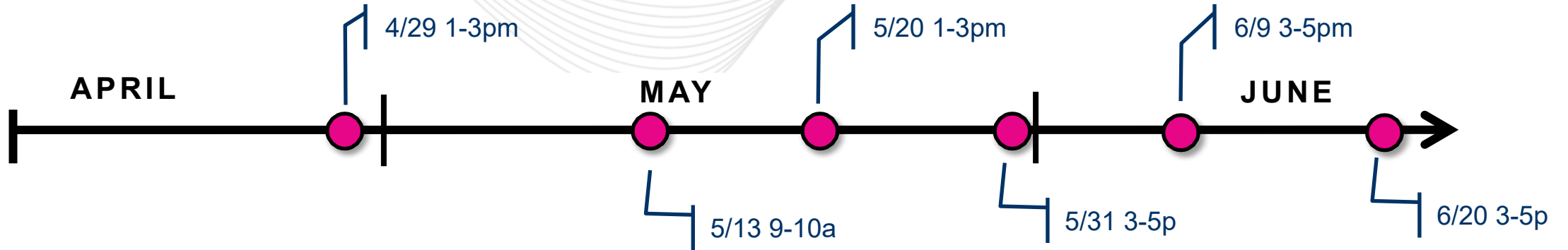
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Full
Compliance By
July 12, 2025

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.



- Directed towards PJM Compliance filing.

PJM reached out to our Transmission Owners help inform compliance efforts with regard to FERC Order 881.

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

[Q2] If YES to Q1, will the TO be providing temp sets as well? [YES/NO]

[Q3] If YES to Q1, how will coordination of ratings (RT & forecasted) take place with neighboring TOs/TOPs?

[Q4] Will a TO be seeking to provide any portion of the 10 day hourly forecast for any facilities?

[Q5] Will a TO have an issue with conforming to an RTO-based historic temp set? (i.e., Rather than one custom to their zone.)

➤ *Included space for **Comments** for each question above, as well as **Overall Comments/Feedback**.*

- ❑ **12 TOs have responded**, as of 4/7 @ 1200.
 - Includes TOs representing multiple PJM TO zones.
 - TO Survey responses **due on 4/7/2022**.

- ❑ Of the respondents, majority leveraged the Comments/Feedback to request further clarity / discussion within the Order and PJMs response to same.

- ❑ We plan to leverage these for further discussion in OC Special Sessions and finalized responses.

- ❑ Areas include:
 - **General:**
 - PJM meetings with the TOs needed to discuss Order 881 vision/direction.
 - Impact to existing emergency ratings sets. (STE, LTE, LD)
 - TO noted support for eDART TERM adjustment (i.e., slight modification to status quo).
 - Comment with regard to the cost/benefit of elements within the Order.
 - Flexible approach; Use of Lookup Tables vs. Telemetering all ratings.

□ (*Continued*):

- **Meteorological Data:**
 - Should PJM and the TOs leverage the same weather stations/feeds?
 - What should be the source for historic temperatures driving 10F° margin?

- **Coordination:**
 - Request for further clarity on EMS data exchange requirements; and, expectations between neighboring TOs.
 - Will PJM be working with neighbors & RTOs to ease ratings alignment between PJM and non-PJM TOs?

- **Exceptions:**
 - Non-conductor / station equipment considerations?

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

- **Mix of YES/NO - Mostly NO; 3 Undecided**
- **Of the 3 Undecided:**
 - 1 – Desires telemetry option for RT ratings. Need work to apply to ALL facilities.
 - 1 – May seek to telemeter RT ratings.
 - 1 – May seek to do so, but preference for ambient rating tables.
- **Of those responding YES:**
 - **May look to do so related to DLR facilities. Ambient ratings tables for**

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[Q2] If YES to Q1 (telemeter real-time ratings), will the TO be providing temp sets as well? [YES/NO]

- **Mix of YES/NO - Mostly NO (aka, N/A); 2 Undecided**
- Of the 2 Undecided
 - Dependent upon PJM requirements.
- Of those responding YES:
 - Would still provide PJM RTO-based ambient look-up rating tables. As a fail-safe.

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[Q3] If YES to Q1, how will coordination of ratings (RT & forecasted) take place with neighboring TOs/TOPs?

- **Mix of YES/NO – Mostly NO (aka N/A); 2 Undecided**
- Of the 2 Undecided
 - Dependent upon PJM requirements.
- Of those responding YES:
 - Would still provide PJM RTO-based ambient look-up rating tables, as a fail-safe. And, expects ratings sharing done via PJM ICCP between TOs.

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[Q4] Will a TO be seeking to provide any portion of the 10 day hourly forecast for any facilities?

- **Mix of YES/NO; Mostly NO; 2 Undecided**
- Undecided
 - Dependent upon PJM requirements & Member company methods.
 - Could lead to data management issues, given volume of data.
- YES
 - No comment provided. (Further discussion needed.)

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[Q5] Will a TO have an issue with conforming to an RTO-based historic temp set? (i.e., Rather than one custom to their zone.)

➤ **Blend of YES/NO responses.**

➤ **Concerns:**

- Entire RTO region historic may extend beyond TO zonal historic. How would this be treated in Exceptions process?
- Concerns for facility ratings at proposed extremes. (-55F° & 130F°)
- Concerns with short time-frames to meet margins needs for real-time use if forecasted temps do not meet +/- 10F° margin.
- Need time to address expanded look-up tables.

[FERC Order 881](#) Topics (paragraphs noted):

- **Sessions 1 & 2 – 4/29 & 5/13:**
 - **TO Survey Results/Concerns.**
 - **Transmission Line Rating & AAR applicability:** 44 thru 46, 83 & Attachment M
 - **Exceptions:** 45, 140, 180, 227 thru 234 & Attachment M
- **Sessions 3 & 4 – 5/20 & 5/31:**
 - **Electronic Update of Ratings:** 179 thru 182, 252 thru 255 & Attachment M
 - **TLR & Methodology Transparency:** 39, 330 thru 343 & Attachment M
 - **Seasonal Ratings:** 5, 185, 211 thru 216, 227 & Attachment M
 - **(Ambient) Rating set use:** 140 thru 143, 185 thru 188 & Attachment M
- **Sessions 5 & 6 – 6/9 & 6/20:**
 - **Finalize above & close out PJM Compliance filing questions.**
 - **Additional questions/concern.**

Presenters / SME:

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FERC Order No. 881



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