



# PJM Ratings Process

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OC Special Session – Outage Coordination

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- In addition to being a ratings database, Transmission Equipment Rating Monitor (TERM) :
  - Allows TOs to submit ratings changes on monitored facilities;
  - Provides feedback to users concerning the status of ratings tickets;
  - Communicates with PJM EMS to track effective ratings;
  - Maintains an audit trail of rating changes;
  - Provides various reports to users concerning select equipment attributes.

- Facilities that are modeled as **Lines, Transformers, Series Devices, Phase Shifters (PARs)** and **Flow Breakers** can have thermal ratings in the PJM EMS.
- Each of these facilities has a monitored priority assigned.
  - In eDART, this is listed as Congestion Management Priority.
- All facilities with the monitored priorities below require ratings:
  - MP1: Reliability and Markets
  - MP2: Reliability BES
  - MP6: Reliability Non-BES

See [Manual 3A](#), Appendix C for detailed description of each monitored priority.

- TOs submit ratings to PJM via TERM consistent with their documented methodology.
- PJM has 8 temperature sets (95°F to 32°F) with Day/Night differentiation available for each temperature.
- For each temperature set,
  - Normal, LTE, STE and Load Dump ratings must be submitted and follow the hierarchy rules.
  - 3% separation is required between LTE and Load Dump.
- In real-time, PJM Operators track temperatures in each TO zone, and decide which temperature set to use.

- TOs can submit permanent or temporary ratings changes:
  - Permanent Tickets
    - Represent the permanent ratings changes, OR
    - Ratings conditions that will last longer than 6 months.
  - Temporary Tickets
    - Typically used for ratings conditions that will last less than 6 months.
    - Require an Estimated End Date in addition to the Start Date.

- There are other fields on every TERM Ticket that provides more details about the ratings change:
  - Reason for Changes\*
  - Planned/Immediate Ticket Type selection\*
  - Company Comments
  - PJM Comments
  - Trans Ticket ID
  - Company Ticket ID

*(\*) represents required field*



# Sample TERM Ticket

### TERM Ticket Revision

Ticket ID: 22083 [REDACTED]    User: s135642    Company: [REDACTED]  
 Company Ticket ID: 22-193512  
 Trans Ticket ID:

Reason for Changes:    
  Planned     Permanent   
 Est. Start:       
 Ticket Status:    
  Immediate     Temporary   
 Est. End:       
 Actual Start:     Actual End:

Comments:    
 PJM Comments:

Type: LINE    Station Name: [REDACTED]   
 Voltage: 138 KV    Equipment Name: [REDACTED]   
 End: END A

Temp	Normal		Long Term		Short Term		Load Dump	
	Day	Night	Day	Night	Day	Night	Day	Night
95	296	296	392	392	392	392	404	404
86	307	307	401	401	401	401	414	414
77	319	319	409	409	409	409	422	422
68	330	330	418	418	418	418	431	431
59	341	341	426	426	426	426	439	439
50	352	352	435	435	435	435	449	449
41	364	364	443	443	443	443	457	457
32	375	375	452	452	452	452	466	466

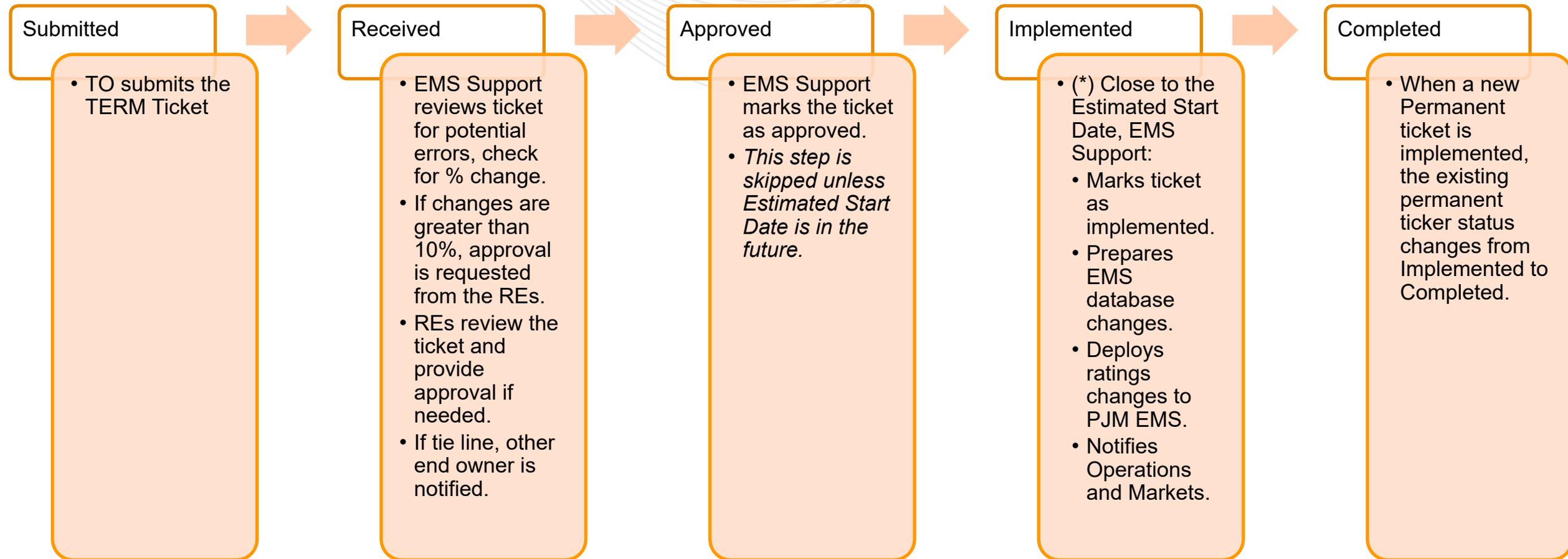
**Impedance/Charging:**  
R = 0.007    X = 0.0575    B = 0.0158

**Congestion Mngt. Priority:**  
Reliability & Markets

Adj. %:

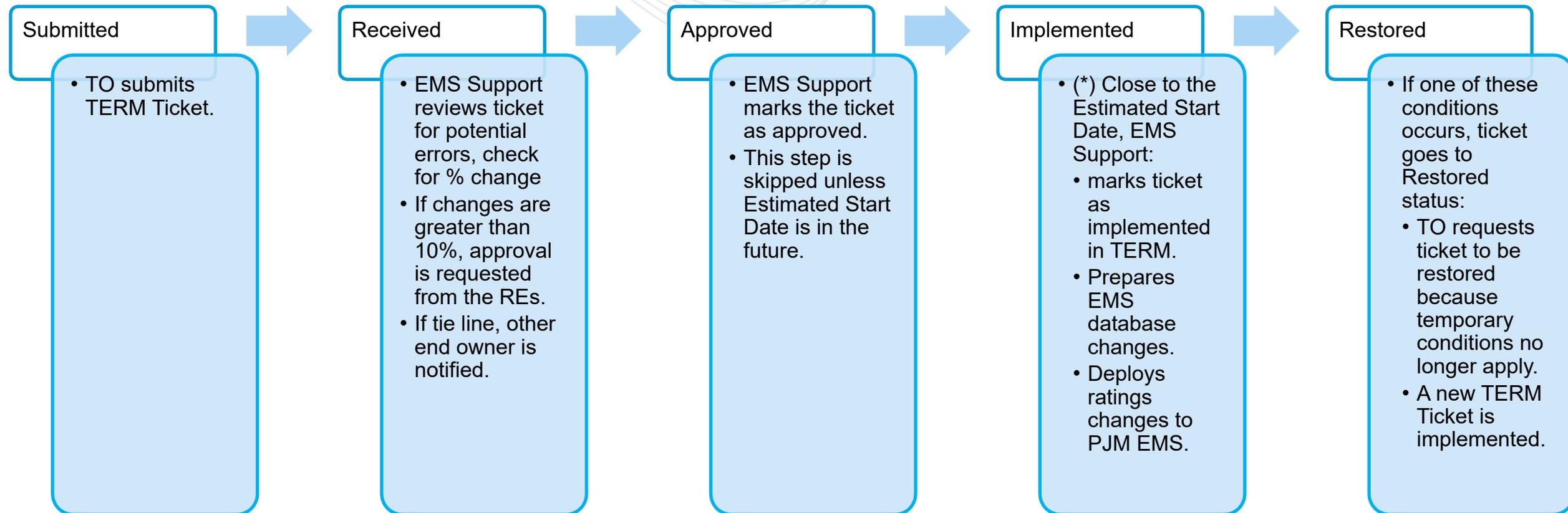
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# Typical Lifecycle of Permanent TERM Tickets



(\* Exact implementation time compared to the estimated start time may vary based on system conditions, time of the day/week, ticket type, and PJM or TO operator discretion/request.

# Typical Lifecycle of Temporary TERM Tickets



*(\*) Exact implementation time compared to the estimated start time may vary based on system conditions, time of the day/week, ticket type, and PJM or TO operator discretion/request.*

- Temporary TERM Tickets do not automatically end once the Estimated End Date is reached.
- When a Temporary ticket should be terminated EMS Support is notified:
  - By the PJM operator via email/phone call.
  - By the TO operator/staff via email.
  - By eDART via email, if the TO or PJM staff clicks “Restore Permanent” button on the TERM Ticket page.
- Once notified, EMS Support prepares and deploys EMS database changes to re-implement permanent ratings.

- PJM operator, at their discretion and coordination with the TO operator, may override the active ratings directly in the EMS.
- This is documented in TERM in form of Temporary tickets.
  - Specific username and PJM comment are used to indicate operator override
  - These tickets are automatically terminated once the override is cleared.

- Permanent and Temporary ratings are posted publicly on [Ratings Information page](#).

Note: TO users can also view ratings that they have Read or Read/Write access to directly in TERM.



## Ratings Information

Type	Frequency	Description
Permanent <a href="#">TXT</a>	Twice per day 9:00 a.m. EPT 1:00 p.m. EPT	<ul style="list-style-type: none"> <li>• All reportable facilities within the PJM operational footprint</li> <li>• Obtained from the PJM Energy Management System</li> <li>• Changes reflect effective permanent ratings</li> </ul>
Temporary <a href="#">TXT</a>	Twice per day 9:00 a.m. EPT 1:00 p.m. EPT	<ul style="list-style-type: none"> <li>• Limited durations, typically less than six months due to reliability and safety</li> <li>• Active, temporary changes, as well as future changes</li> <li>• Estimated dates are provided to indicate when the temporary ratings are in effect.</li> <li>• The facilities will revert to their permanent ratings upon the completion of the temporary rating change.</li> </ul>
NERC Alert <a href="#">TXT</a>	Twice per day 9:00 a.m. EPT 1:00 p.m. EPT	Rating changes due to NERC Alerts (Emergency or Near term) issued to verify field conditions are consistent with established ratings as per standards FAC-008 and FAC-009.
Effective <a href="#">ZIP</a>	Every 10 minutes	<ul style="list-style-type: none"> <li>• Permanent and temporary ratings</li> <li>• NERC Alert changes</li> <li>• Dynamic Ratings Forecast files - For transmission owners with Dynamic Line Ratings (DLR) facility, the zipped file contains individual company files with DLR forecasted information for up to the next 48hrs.</li> <li>• Real Time DLR</li> </ul>

- FERC Order 881 brings reforms to the existing ratings processes.
  - Compliance is required by July 12, 2025.
- Note that the topics covered in this presentation are subject to change to comply with FERC Order 881.
  - Temperature Sets
  - Active rating selection
  - Forecasted ratings
  - Ratings Postings

- The following PJM Manuals have additional information about the facility ratings process at PJM:
  - [Manual 03A](#), **Appendix A: TERM Equipment Ratings Update Process**
  - [Manual 03](#), **Section 2.1.1: Facility Ratings**
- All TERM Tickets and Ratings related questions can be directed to: [TERMTickets@pjm.com](mailto:TERMTickets@pjm.com)

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## **PJM Ratings Process**



### **Member Hotline**

(610) 666 – 8980

(866) 400 – 8980

[custsvc@pjm.com](mailto:custsvc@pjm.com)

**PROTECT THE  
POWER GRID**  
**THINK BEFORE  
YOU CLICK!**



Be alert to  
malicious  
phishing emails.

**Report suspicious email activity to PJM.**  
(610) 666-2244 / [it\\_ops\\_ctr\\_shift@pjm.com](mailto:it_ops_ctr_shift@pjm.com)

