



Integrating Dynamic Ratings into PJM Operations (Phase 1)

Problem / Opportunity Statement

In Order No. 881, FERC directed PJM to facilitate the operational implementation of dynamic ratings systems to better reflect the actual transfer capability of the transmission system. ~~Managing Transmission Line Ratings, Consistent with~~ Order No. 881, ~~177 FERC ¶ 61,179, PJM proposes to develop manual language that will help it establish and maintain systems and procedures necessary to allow transmission owners to electronically update transmission line ratings (for each period for which transmission line ratings are calculated) at least hourly. Order No. 881 at P37, P255 (2021).~~

Consistent with FERC's directive, and because of an actual deployment of dynamic rating system in the PJM footprint, PJM seeks ~~to initiate a stakeholder~~ through the Quick Fix process to enable the operational implementation of dynamic ratings. ~~These efforts will promote the efficient and reliable operation and use of equipment dynamic rating systems.~~

PJM proposes the development of a separate Problem Statement and Issue Charge to explore a different set of issues relating to dynamic line ratings at the appropriate Standing Committee(s) or a new Senior Task Force. Topics for discussion as part of this separate stakeholder process would include: impact (if any) to ARR/FTR markets, impact (if any) to planning processes, and potentially other topics.

~~Stakeholder engagement is necessary to efficiently and effectively incorporate automated dynamic rating systems into PJM's Real-time Assessment, Operational Planning Analysis and Day Ahead Market systems. Manual language that may be considered regarding the technical implementation of dynamic rating systems should align with existing rating change processes and associated governing document language where possible. Such Manual language may also provide guidance to PJM and its members regarding the operational responsibilities of the equipment owner and PJM in the use of dynamic ratings on PJM tariff facilities. Additionally, this Manual language may include data quality and owner coordination requirements necessary to ensure the utilization of such dynamic ratings.~~

~~In Order No. 881, the Commission "decline[d] to mandate DLR implementation" and instead opened a new docket — Docket No. AD22-5-000 — "to further explore DLR implementation." Consistent with FERC's approach, upon completion of Phase 1, PJM's proposed Phase 2 will offer stakeholders an opportunity to further explore dynamic rating system implementation to the extent not already addressed by Order No. 881 and PJM's compliance filing in accordance with it.~~

Education

Discussions related to this opportunity should build upon recent stakeholder education provided in the March 30, 2021 Operating Committee Special Session on DYNAMIC RATING Education. Additionally, the following stakeholder presentations may be referenced:

- 1) <https://pjm.com/-/media/committees-groups/forums/emerging-tech/2020/20200827/20200827-item-05-dynamic-line-ratings.ashx>
- 2) <https://pjm.com/-/media/committees-groups/forums/emerging-tech/2020/20201113/20201113-item-03c-Dynamic-Rating-impacts.ashx>
- 3) <https://pjm.com/-/media/committees-groups/forums/emerging-tech/2021/20210111/20210111-item-03-Dynamic-Rating-market-efficiency.ashx>
- 4) <https://pjm.com/-/media/committees-groups/committees/teac/2020/20201223-special/20201223-item-04-emergent-technologies-modeling-overview.ashx>