

Limitations of Day-Ahead Zonal Load Distribution Factors

Issue Source

PJM

Issue Content

Per current business rules, Day-ahead zonal load bus distribution factors are derived from a single market hour one week prior to the Operating Day, wherefore the percentage of zonal load attributed to each nodal load will remain constant for all 24 hours. With an influx of non-conforming loads in conjunction with assigned zonal factors from this single morning hour, nodal load ratios can differ from what is expected in Real-time, creating a potential misalignment between Day-ahead and Real-time. This initiative intends to improve upon the zonal load factors used in the Day-ahead Energy Market to better represent actual Real-time operations.

Key Work Activities and Scope

1. Education for current practice.
- 1-2. Historical analysis to evaluate the impact of using the distributions from 8:00 am from 1 week prior relative to the proposed solutions.
- 2-3. Propose modifications to the historical snapshot used for use-of zonal load factors in the Day Ahead Market.
- 3-4. Identify, examine and implement any necessary changes to existing PJM business rules to accommodate the potential solution(s) for this issue.

Expected Deliverables

- Updates to the OATT Section 31.7c(i)
- Subsequent updates to Manual 11 and Manual 28

Decision-Making Method

Tier 1

Stakeholder Group Assignment

Market Implementation Committee (MIC) utilizing the CBIR Lite path (Manual 34 Section 8.6.2)

Expected Duration of Work Timeline

It is estimated this work will take 4 months. It can start in July-September 2022, or a date as determined by PJM stakeholders.

| Start Date | Priority Level | Timing | Meeting Frequency |
|-------------------------------------|---|--|--|
| <u>7/13/2022</u> <u>9/7/2022</u> | <input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low | <input checked="" type="checkbox"/> Immediate <input type="checkbox"/> Near Term <input type="checkbox"/> Far Term | <input type="checkbox"/> Weekly <input checked="" type="checkbox"/> Monthly <input type="checkbox"/> Quarterly |

Charter

(check one box)

| | |
|-------------------------------------|--|
| <input type="checkbox"/> | This document will serve as the Charter for a new group created by its approval. |
| <input checked="" type="checkbox"/> | This work will be handled in an existing group with its own Charter (and applicable amendments). |

More detail available in M34; Section 6