July 22, 2026
Dominion Load Transfer Event

Matthew Wharton,
Manager, Reliability Engineering

System Operations Committee
July 31, 2026

Disclaimer: While materials are current at the time of publishing, applicable requirements may change. PJM Governing Documents control.

PJM © 2026

Event Summary

- On Wednesday, July 22, at 07:56 approximately 3,800 MW of load transferred to back-up power when a 230 kV transmission line fault occurred within the Dominion zone
- This event was the largest load transfer PJM has experienced
  - Similar events occurred on July 10, 2024, and February 17, 2025
    - ESIG – Large Load Workshop
    - NERC Incident Review – Considering Simultaneous Voltage-Sensitive Load Reductions

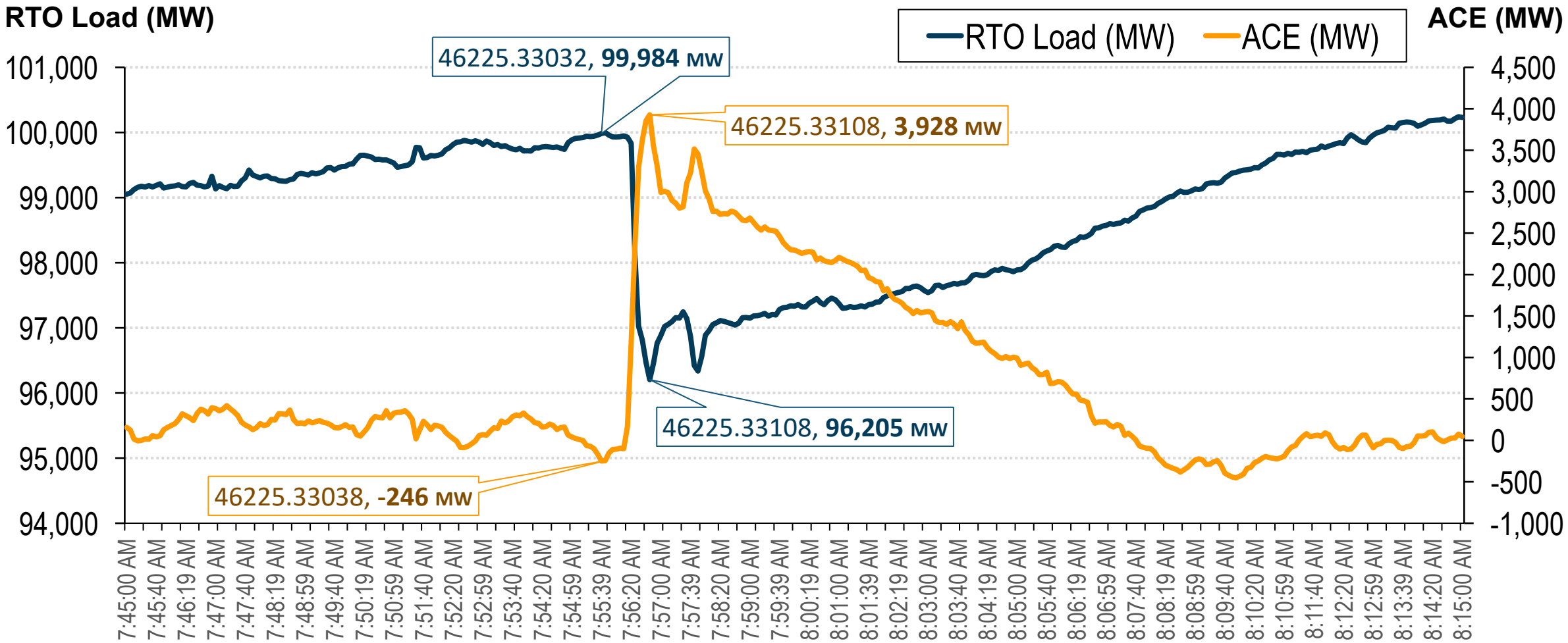
PJM © 2026

Sequence of Events

- 07:56 Fault detected on a 230 kV line in Dominion
  - Load transferred to back-up generation
  - The load transfer caused high voltage conditions and triggered the transfer of additional load to back-up generation
  - In total, approximately 3,800 MW of load transferred to back-up generation
  - Fault cleared properly
    - There were no relay misoperations or stuck breakers
- 07:56 Reporting ACE reached +3,928
- 07:56 Frequency reached 60.092
- 08:06 BAAL excursion recovered within 9 minutes
  - BAL-001-2 R2 requires recovery within 30 minutes

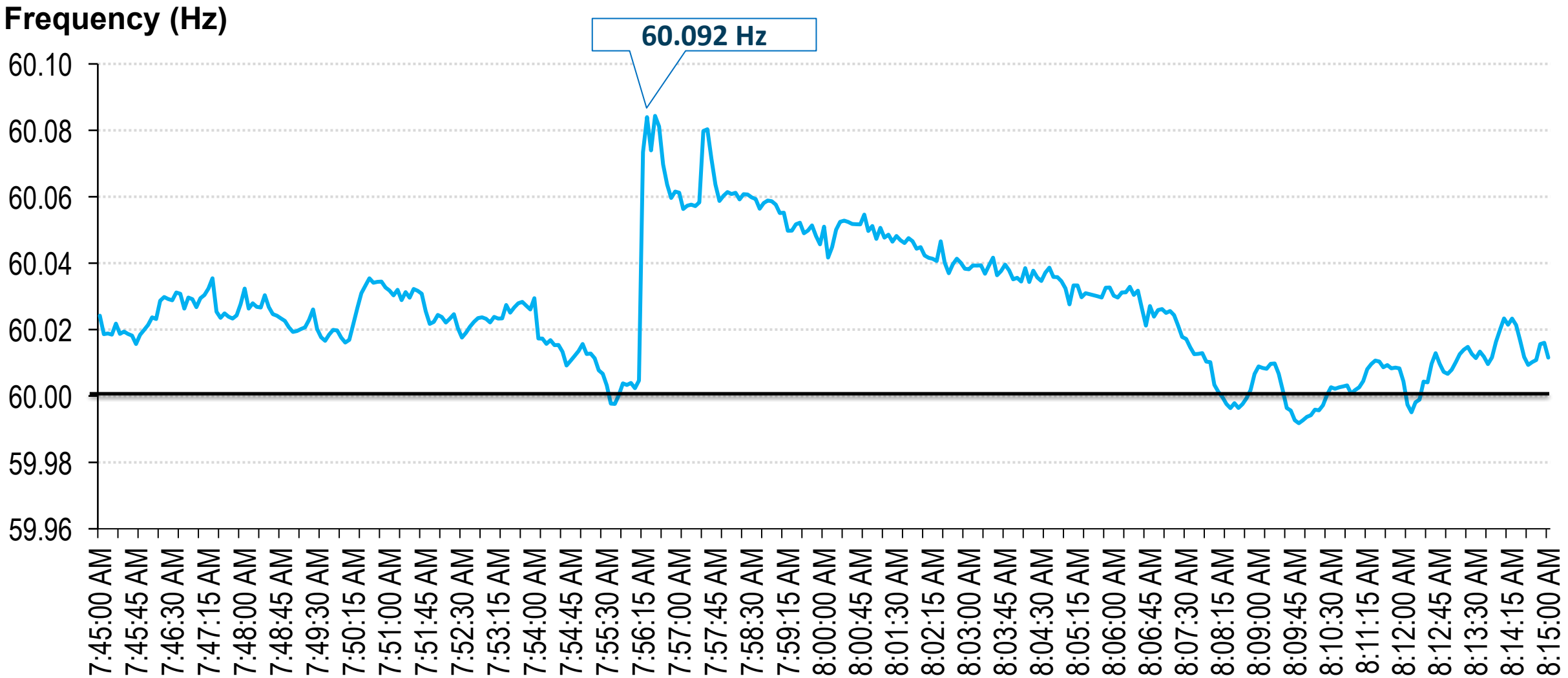
PJM © 2026

RTO Load vs. ACE



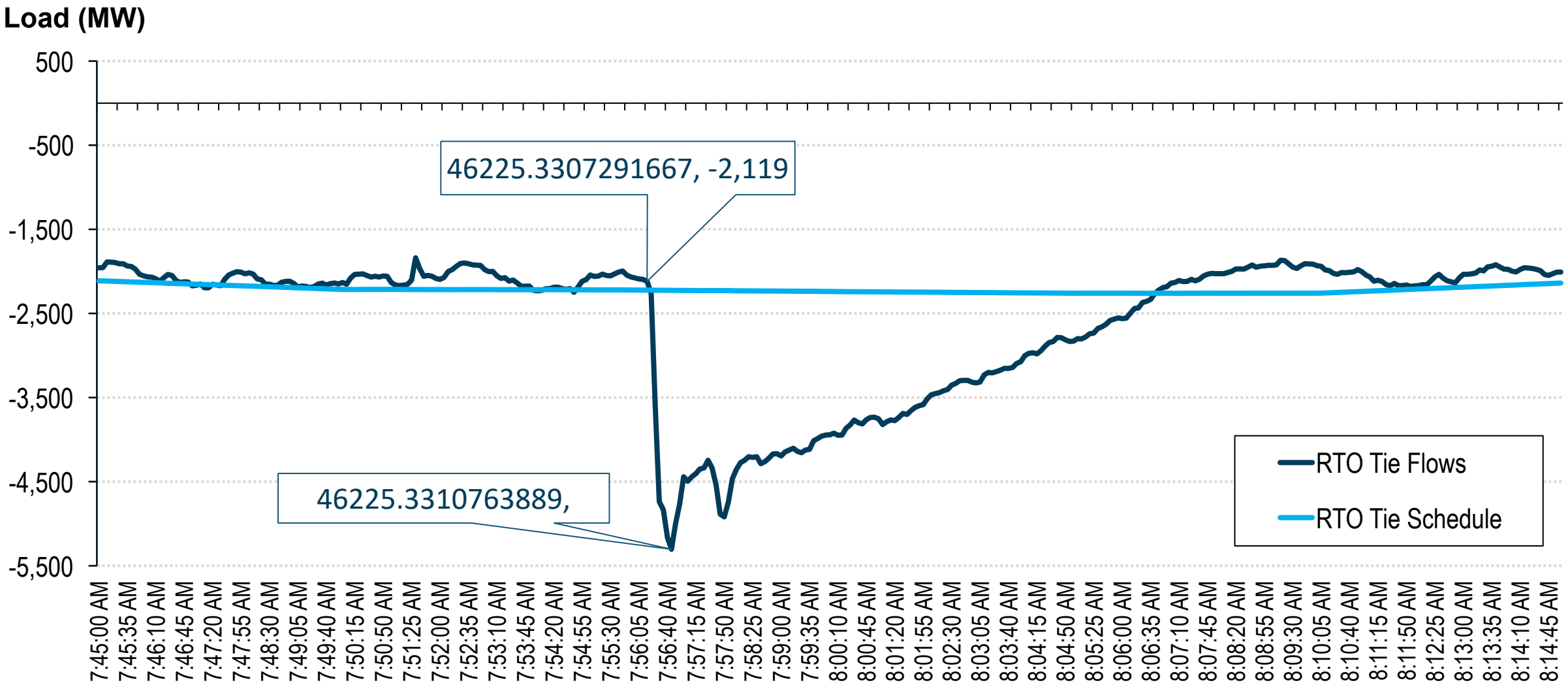
PJM © 2026

July 22, 2026 – Frequency



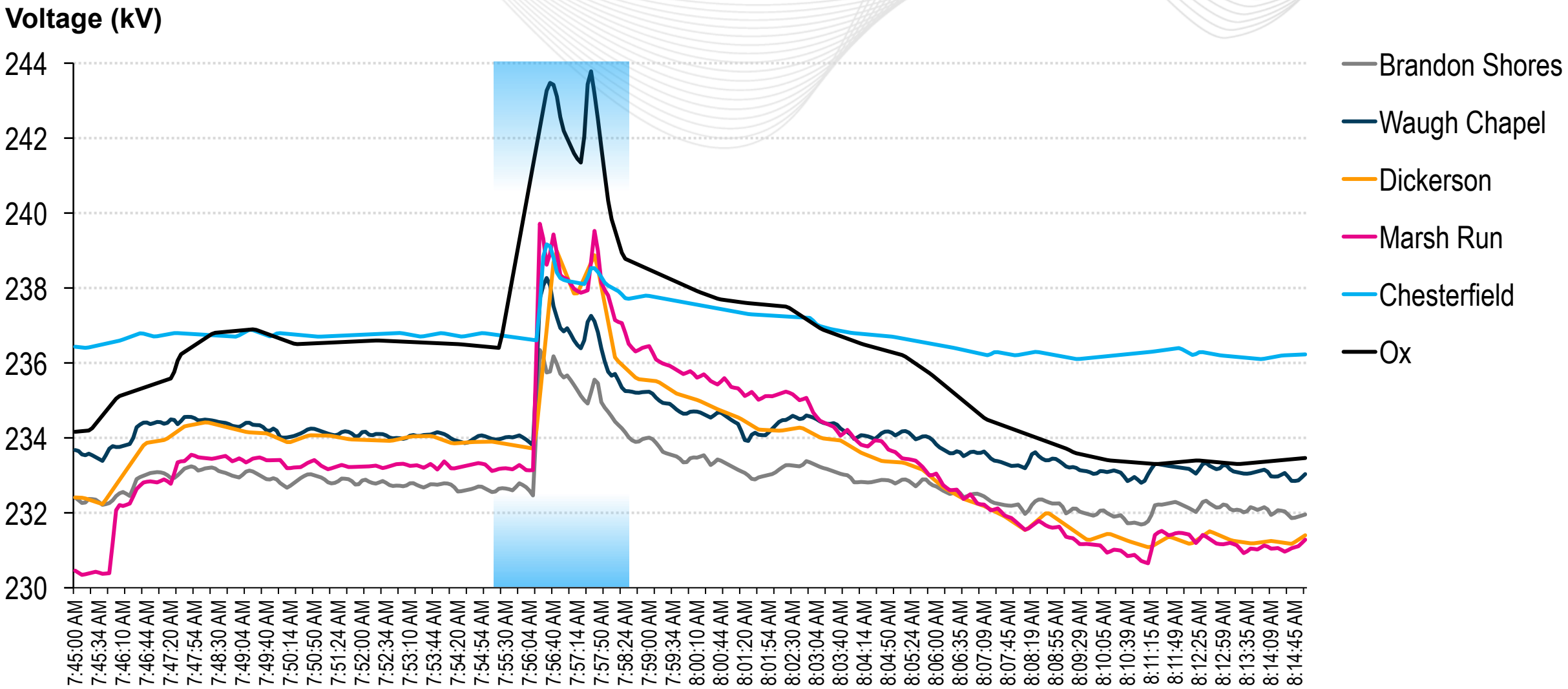
PJM © 2026

RTO Tie Flows vs. RTO Schedule



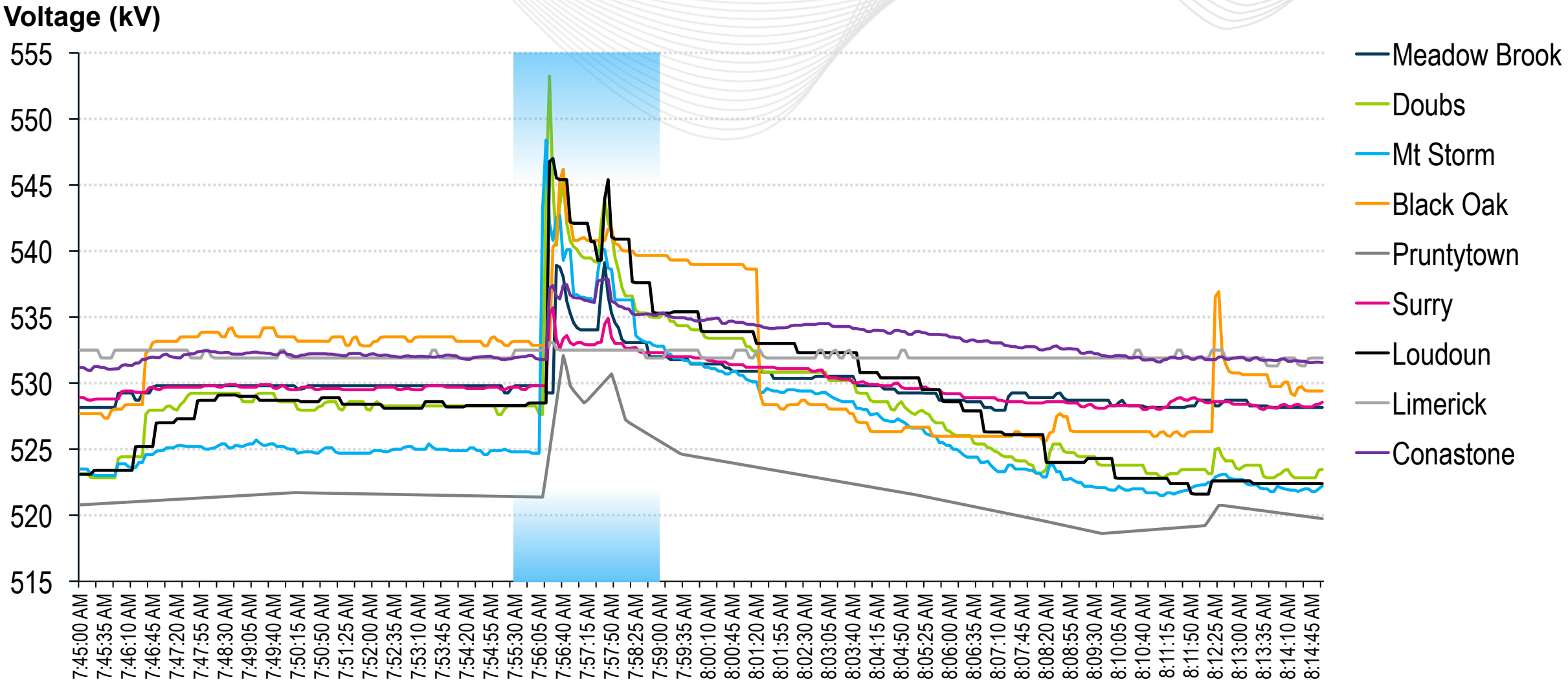
PJM © 2026

230 kV Voltages



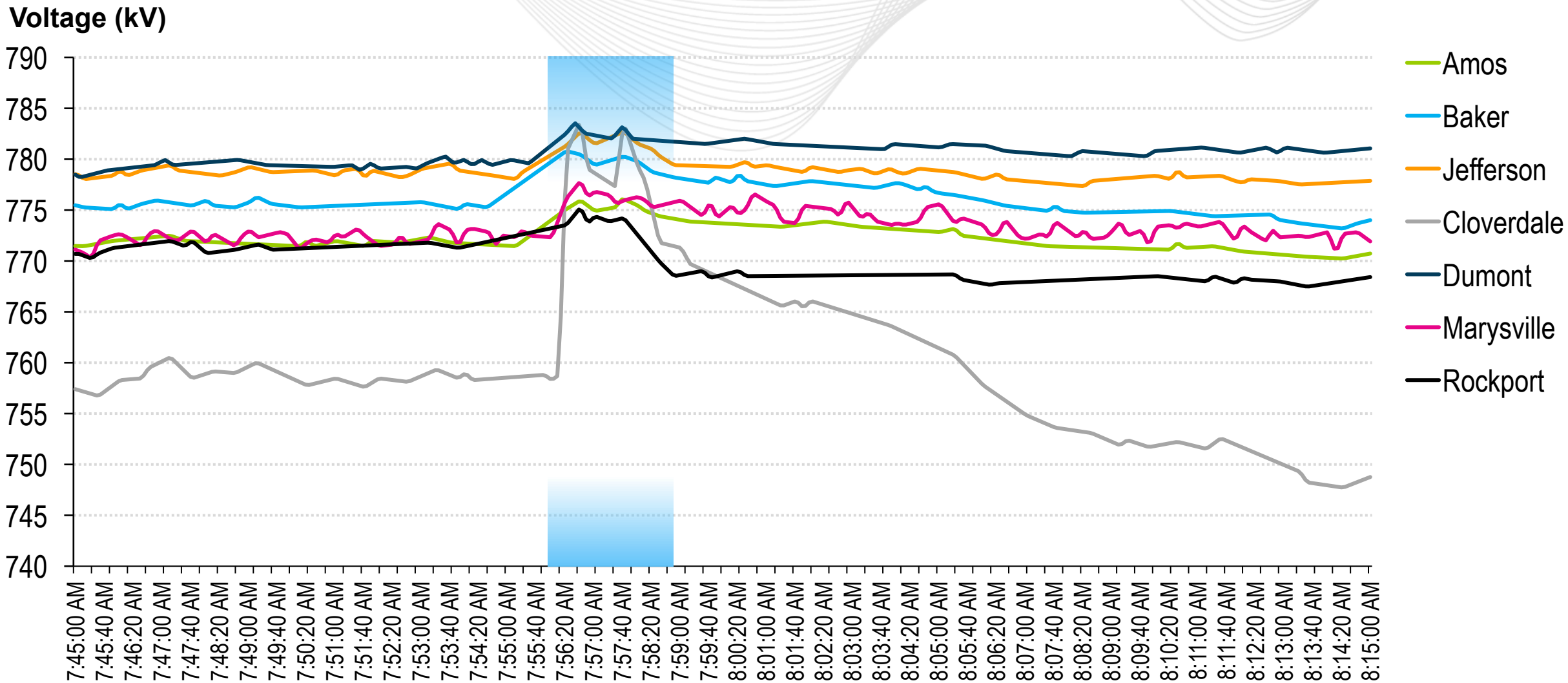
PJM © 2026

500 kV Voltage



PJM © 2026

765 kV Voltage



PJM © 2026

NERC Reliability Standards
Project 2026-02 Computational Loads

Disclaimer: While materials are current at the time of publishing, applicable requirements may change. PJM Governing Documents control.

PJM © 2026

Project 2026-02 Goals

- Project Goals include developing:

1. Changes to **NERC Glossary to align with Rules of Procedure modifications**
2. Requirements to address **integration of Computational Loads onto the BPS**

- "This drafting team will develop one or more Reliability Standard(s) to address in the near-term **essential actions** entities must take to assure the reliable integration of large loads into the BPS."
- NERC/SDT is on-track to file with FERC by December 31, 2026
  - FERC Docket RD26-7-000 directing NERC to file by December 31, 2026

PJM © 2026

NERC Project 2026-02 Computational Loads

- **Draft** Standards expected to address **foundational** essential actions:
  - TOs and DPs to have Computational Load Site* interconnection requirements (Similar to FAC-001-4 R1)
  - PCs and TPs to develop steady-state, dynamics, and short circuit modeling data requirements (Similar to MOD-032-1 R1)
    - Data necessary for capabilities related to tripping, ride-through, and Disturbance recovery
- Phase 1 will not address the minimum voltage or frequency ride-through

PJM © 2026

NERC Draft Rules of Procedures

- **Computational Load Site** - One or more buildings, structures, or installations that:
  - primarily contains information technology infrastructure used for:
    - creating, executing, and delivering software applications and services;
    - artificial intelligences training, deployment, and delivery;
    - cryptocurrency mining; or
    - other computational activities at a data center; and
  - is supplied through electrical equipment that is connected to the Bulk Power System.

- **Computational Load Owner (CLO)*** - The entity that owns and maintains a Computational Load Site.

- **Computational Load Operator (CLOP)*** - The entity that operates a Computational Load Site.

- *Registration only applicable for Computational Load Sites greater than or equal to 50 MW that is connected at a voltage greater than or equal to 100 kV from one or more points of connection.

PJM © 2026

NERC – Minimum Ride-Through Requirements

- NERC Large Load Working Group (LLWG) has developed a draft whitepaper on Large Load Disturbance Performance
  - Posted for industry comment on July 30
    - 30-day comment period
- Defines a minimum technical capability floor for computational load voltage ride-through and Post Fault Active Power Recovery
  - Allows regional or local modification where system-specific analysis demonstrates a need for more stringent requirements
- Expected to become part of a Reliability Standard in 2027

PJM © 2026

NERC LLWG – Standard Authorization Request Roadmap

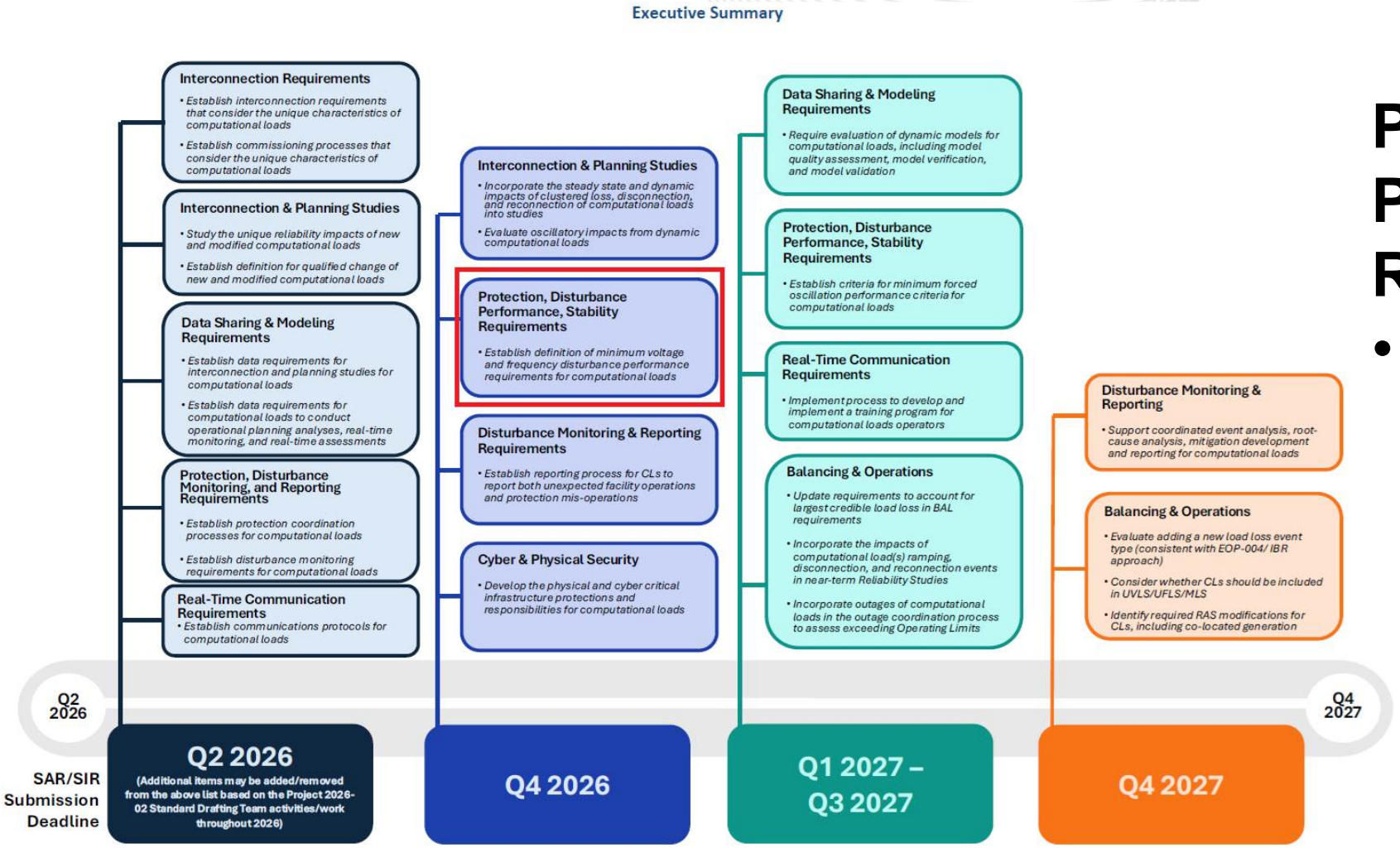


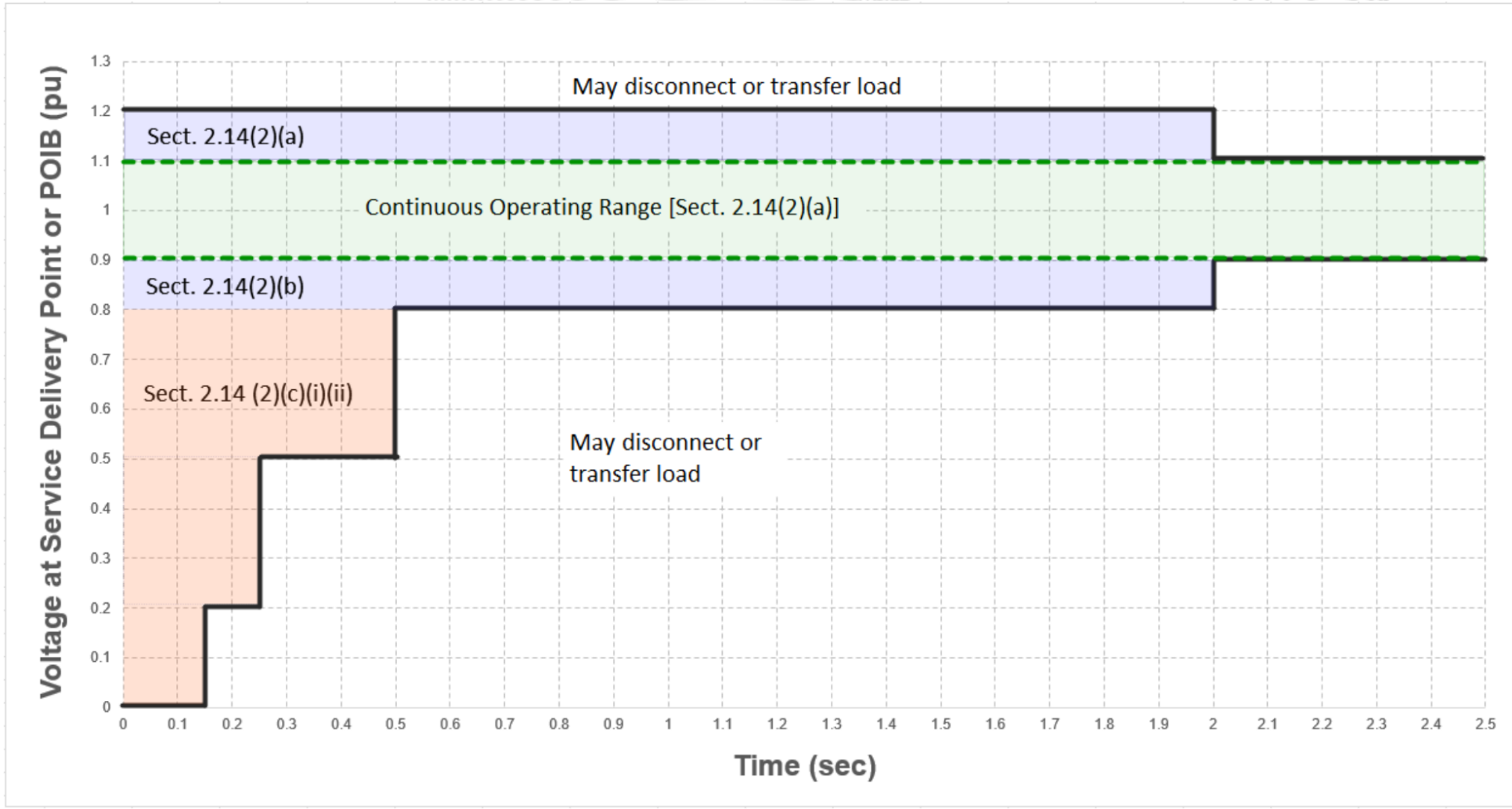
Figure 1: SAR/SIR Development Roadmap[3]

Protection, Disturbance Performance, Stability Requirements

- Establish definition of minimum voltage and frequency disturbance performance requirements for computational loads

PJM © 2026

ERCOT Voltage Ride-Through Requirements



PJM © 2026

Next Steps

- PJM and Dominion continue to jointly review the event and its system impacts.
- PJM is evaluating potential enhancements to reliability requirements, including consideration of existing and future industry ride-through standards and practices.
- Additional findings and lessons learned from the joint PJM-Dominion review will be presented at the August 6 Operations Committee Meeting.

PJM © 2026

Contact

Presenter:
Matthew Wharton,
Matthew.Wharton@pjm.com

Dominion Load Transfer Event

Member Hotline

(610) 666 – 8980

(866) 400 – 8980

custsvc@pjm.com

PJM © 2026

PROTECT THE POWER GRID

THINK BEFORE YOU CLICK!

pjm

BE ALERT TO MALICIOUS PHISHING EMAILS

Report suspicious email activity to PJM.

Call (610) 666-2244 or email it_ops_ctr_shift@pjm.com

PJM © 2026