



Transmission Planning Resilience Update

Grace Niu
Lead Engineer, Transmission Planning

Planning Committee
February 06, 2024

Why was resilience effort initiated?

What progress has been made?

Where are we now?

What are the next steps?

2018

- FERC initiated a resiliency proceeding (Docket No. AD18-17)
- Evaluate issues pertaining to the resilience of the bulk power system
- Understand how RTO/ISOs addressed regional threats to resilience

2021

- FERC closed the Resiliency Proceeding
- Do not believe that any separate action is required
- The resilience and reliability of the bulk power system must – and will – remain one of the Commission's paramount responsibilities and concerns

2022

- FERC issued several NOPRs, address resilience indirectly
- NOPR No. 1: Long-Term Planning NOPR, Docket No. RM21-17
- NOPR No. 2: Transmission System Planning Performance Requirements for Extreme Weather Docket No. RM22-10
- NOPR No. 3: One-Time Informational Reports on Extreme Weather Vulnerability Assessments, Climate Change, Extreme Weather, and Electric System Reliability, Docket No. RM22-16

PJM Resilience Progress: Transmission Planning

2018

- Strategic discussion

2019

- Critical Infrastructure Stakeholder Oversight (CISO)
- CIP-14 mitigation & avoidance

2020

- CIP-014 mitigation: FERC approved the addition of Attachment M-4 to the PJM Tariff in March
- Allows for projects to mitigate impacts to the system where a critical substation is lost, without publicly disclosing highly sensitive information
- Five-year window to begin project construction (March 2025 sunset date)
- Applicable to specific set of “less than 20” facilities identified as of 2018

2021

- CIP-014 avoidance: Critical Substation Planning Analysis (CSPA) was approved in June
- Guard against creation of new critical facilities

Critical Substation Planning Analysis (CSPA)

- Evaluate proposed system reinforcements, seek to prevent creation of new critical facilities
- If a proposed project fails CSPA Do No Harm study, technical specifications of a proposal may be modified

Support M-4 project

- Transmission Owner propose M-4 projects to address critical facilities identified as of 2018
- PJM provides review, verification and consultation

CIP-14 verification

- Transmission Owners evaluate and identify critical substations
- PJM provides third-party verification

Perform RTEP resilience studies

Support stakeholder resilience effort

Improve study procedure

Report findings to TEAC

SME/Presenter:
Grace Niu

Grace.Niu@pjm.com

Transmission Planning Resilience Update



Member Hotline

(610) 666 – 8980

(866) 400 – 8980

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

