



# FERC Notice of Proposed Rulemaking (NOPR) Transmission System Planning Performance Requirements for Extreme Weather Workshop #2

## PJM response plan to the NOPR

Planning Committee

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Enhanced reliability and resilience planning includes:

## Weather

- Derecho
  - Hurricanes and flooding
  - Droughts
  - Wildfires
  - **Hot and Cold Temperatures (This NOPR only)**
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- Gas Pipeline Contingencies
  - Fuel Security
- 
- Minimum Interregional Transfer Capability
  - Reduce CIP 14 Facilities
  - Electromagnetic Pulse
  - Geomagnetic Disturbances

## I. General Comments

- A. PJM concurs with FERC’s objectives, but is concerned with the *manner* in which the NOPR proposes to achieve those objectives.
  - i. Uses *one* component of FERC’s jurisdiction to address only *one* aspect of “enhanced reliability”—a broad topic that touches many aspects of FERC’s jurisdiction (see prior diagram).
  - ii. Assigns solution *exclusively* to NERC, which:
    - Risks creating an expanded role for NERC in system planning that is exogenous to the core functions and competencies of the ERO (both in drafting and implementing/enforcing the standard); and
    - Would create unnecessary distance between the regulation and critical PJM stakeholders (e.g., states, TOs, load, suppliers) who are *already engaged* with PJM in many respects regarding planning for extreme hot and cold weather events, through PJM’s *existing* Commission-approved planning processes.

- B. Rather than pursuing this approach, PJM suggests some alternative approaches that could help achieve the Commission's important stated objectives:
- i. Provide support for efforts by RTOs and transmission planners nationwide to engage in intermediate and long-term enhanced reliability planning;
  - ii. Use FERC's convening authority to bring together transmission planners, DOE, NERC, NOAA, and others, to address key national aspects of resilience, including criteria to analyze an appropriate level of interregional transfer capability, reduction of CIP-14 vulnerabilities, gas/electric interdependencies, etc.
  - iii. Sequence any NERC process to build on these prior steps, while avoiding overlapping with individual RTO stakeholder work and otherwise straining RTO and state/stakeholder resources.
  - iv. Comprehensively harmonize the different NOPRs, where a portion of the resilience issue is assigned to NERC, while others remain in LTRP scenario planning.
    - i. Actionable enhanced reliability driver.
    - ii. Add "enhanced reliability" as a factor to the 20+ year process.

## II. Comments on Specific Directives

If the Commission nonetheless pursues the approach as described in the NOPR, PJM provides the following general comments on the specific directives. Generally, PJM believes that development of NERC guidelines is an appropriate starting place and should be coordinated to the extent possible for all three pillars of this NOPR.

### *i. Establishing Benchmark Planning Cases*

- NERC Guidelines and criteria development should consider regional variances and reflect a statistically credible scenarios for the conditions planned to.

### *ii. Transmission System Planning – Events, Methods and Approaches*

- Extreme weather analysis should focus on *region-wide* area events, using both steady state and dynamic analysis methods. More localized events maybe considered based on their impact.
- Probabilistic planning approaches and statistical methods should be used in basecase building and assessing load loss.
- Include the expected resource mix's availability during extreme weather conditions and the broad-area impacts of extreme weather.

### *iii. Corrective Action Plans*

- Focus on enhanced interregional transfer capability to support import requirements.
- Transmission Switching and Outage Coordination are better fit for the operational domain, and should not be a focus of Transmission Planning NERC Standard TPL-001-5.
- Focus should be on impact of region-wide, persistent extreme heat and cold.

## **III. Implementation**

- A. Guidelines and Criteria Development: Proposal requires multi-agency input (e.g. NOAA, DOE, NERC).
- B. 1 year for NERC development of a standard is insufficient.
- C. 1 year for Registered Entity implementation of a standard is insufficient.
- D. Prior instances of Commission-directed standards on short time frames indicates a need to revise after approval and implementation.
  - i. GMD
  - ii. Physical security.

- PJM's position is generally aligned with the feedback received from Stakeholders.
  - PJM will be looking for NERC to coordinate and drive a nation-wide criteria. FERC should use its convening authority to bring NERC, DOE, labs, and NOAA to the table in this effort as no one RTO can do this alone
  - Some stakeholders think complex assessments/tools will be required:
    - Generation Deliverability:
    - Load Deliverability: CETO / CETL
      - Deliverability tests under extreme weather conditions may not be the same as those under non-extreme weather conditions.
- Extreme weather may be prudently analyzed under more simplistic study and tests. Since study condition is already stressed enough (eg: single contingencies vs double contingencies)
  - Consideration of (Downstream) impacts: Fuel Supply Systems, Water Supply, Traffic and human, response times, Long-lead load notification: Demand Response



- PJM will be providing responses in alignment with the direction outlined herein.
- Only high-level comments regarding feedback, consideration and proposed methodologies to the three NOPR pillars will be provided to FERC in the NOPR response
- NOPR comments to be submitted by August 26<sup>th</sup>



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