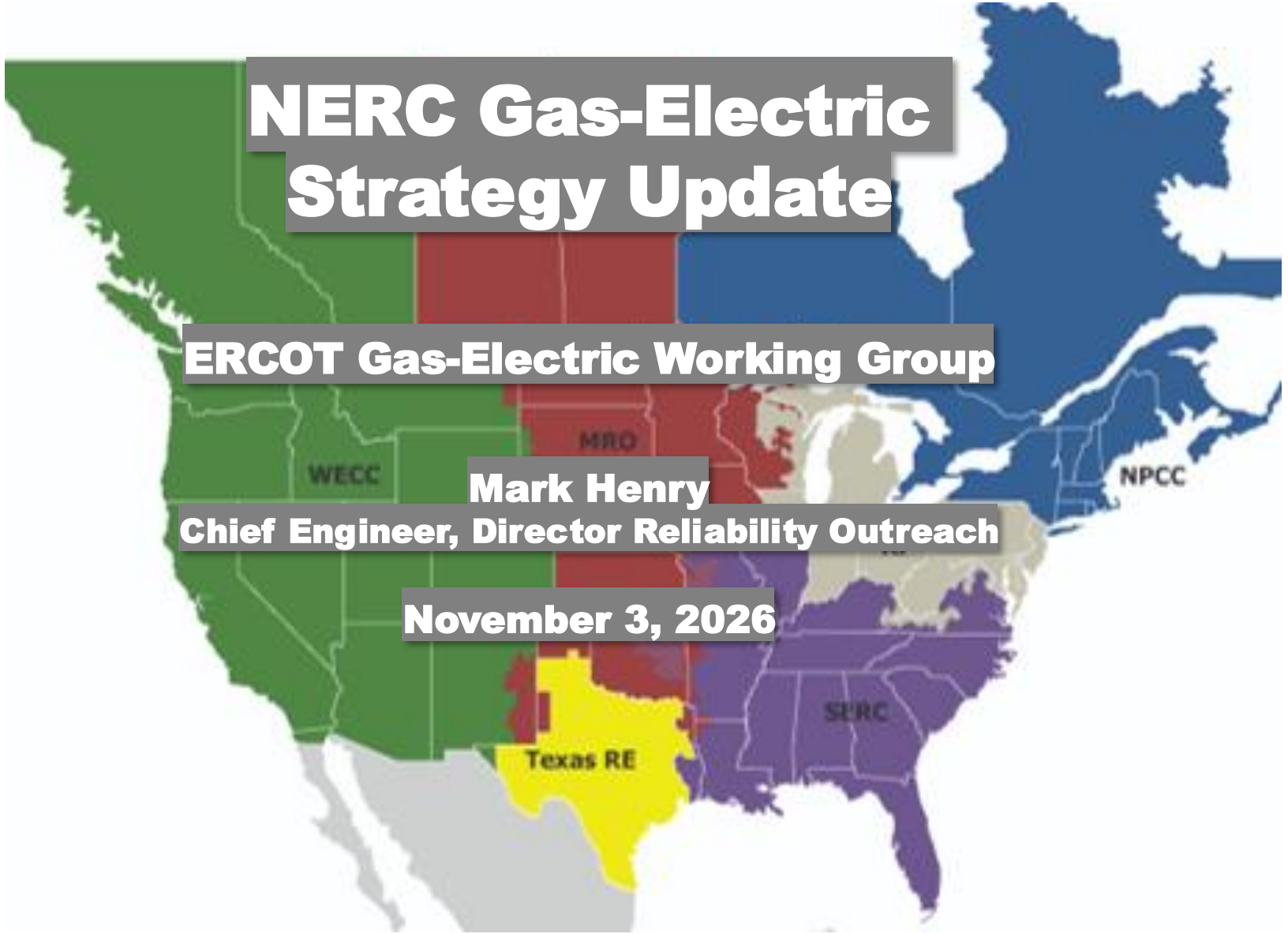
TEXAS RE

NERC Gas-Electric Strategy Update



ERCOT Gas-Electric Working Group

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November 3, 2026

Core Tenets of ERO Enterprise (NERC and Regions) Strategy

The North American Electric Reliability Corporation (NERC) is a regulatory authority that monitors bulk grid risks and develops and enforces Reliability Standards. Texas Reliability Entity, Inc. (Texas RE) is one of NERC's six Regional Entities.

ERO Enterprise Strategy		
IDENTIFY THE RISK	ASSESS AND PRIORITIZE THE RISK	MITIGATE AND REMEDIATE THE RISK
Periodic Benchmarking	Data Collection	Webinars and Workshops
Reliability Assessments	Modeling Tools	Establish Monitoring Criteria
Peformance Analysis	Create and Refine Scenarios	Guidelines
Event Analysis	Interdependency Criteria	Alerts
Joint Inquiry Reports	Modeling and Study Improvements	Standard Development

Key Reliability Risks / Mitigation Opportunities

Natural Gas Supply and Transportation Risks

Electric and Gas Market Harmonization Risks

Resource Adequacy and Capacity to Support Large Ramps Risks

Vulnerabilities in Generator Winterization Risks

Mitigation Opportunities

- Enhanced Winterization Requirements
- Operational Preparedness
- Improved Communication Protocols
- Market Reforms
- Cross-Market Coordination
- Capacity and Energy Planning for Ramps
- Regulatory Reform

Strategic Objective and NERC's Approach

NERC seeks to enhance the gas-electric harmonization utilized in the development of assessments, situational awareness and potential, future reliability standards.

- **Inform** risk mitigation through real time awareness, assessments and objective insights
- **Identify** mitigations we can lead
- **Collaborate** with stakeholders to drive mitigation actions outside of NERC's purview

Strategic Focus Areas









Implement new tools supporting the monitoring of critical gas assets impacting BPS operations and generator performance

Incorporate gas infrastructure adequacy impacts into assessment studies

Identify and implement potential electric-gas enhancements to NERC Reliability Standards

Engage industry and government agencies to drive action on relevant electric-gas coordination initiatives

Inform

Identify

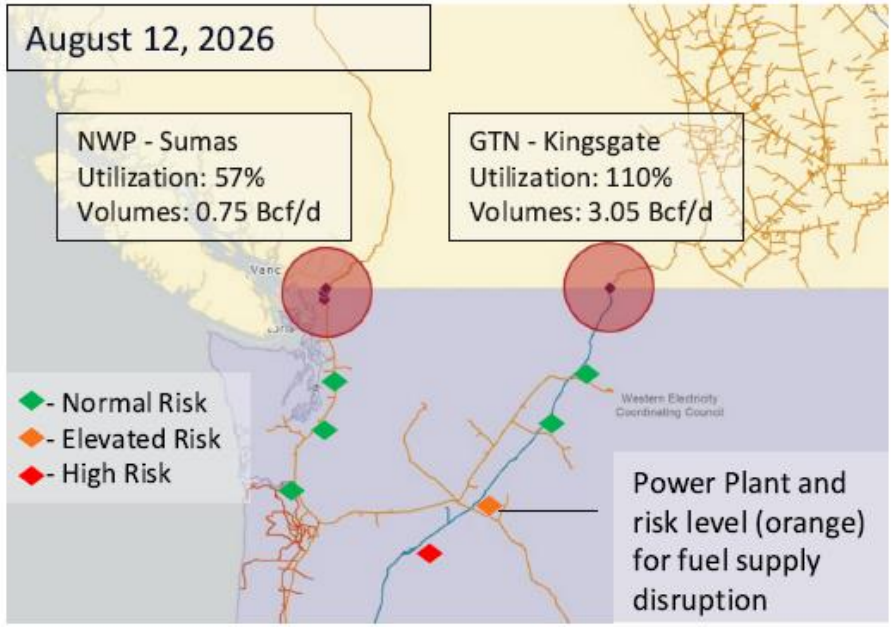
Collaborate

Bulk Power System Awareness and Real-time Notices

Implement new tools supporting the monitoring of critical gas assets impacting BPS operations and generator performance

Situational Awareness

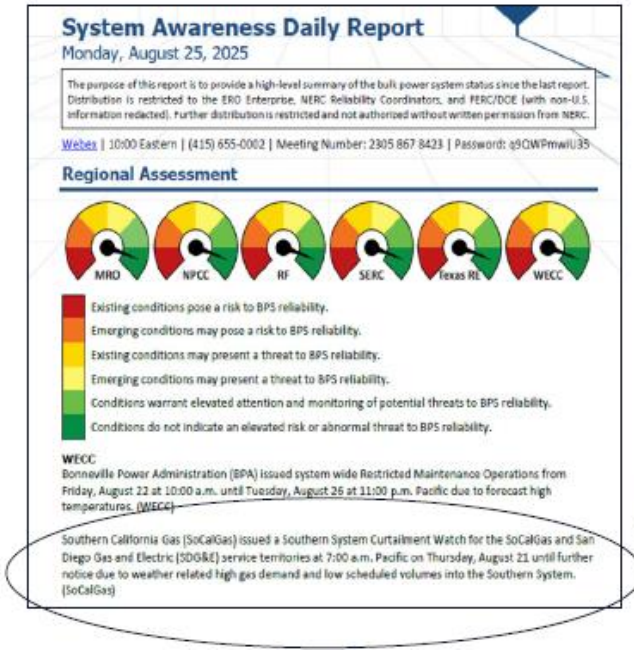
Map pipeline constraints daily and identify delivery points at maximum utilization in typically constrained areas



Note: Plant color/location are conceptual/illustrative

Real-Time Notices

Provide near real-time gas pipeline data for increased situational awareness



"Southern California Gas (SoCalGas) issued a Southern System Curtailment Watch for the SoCalGas and San Diego Gas and Electric (SDG&E) service territories at 7:00 a.m. Pacific on Thursday, August 21…."

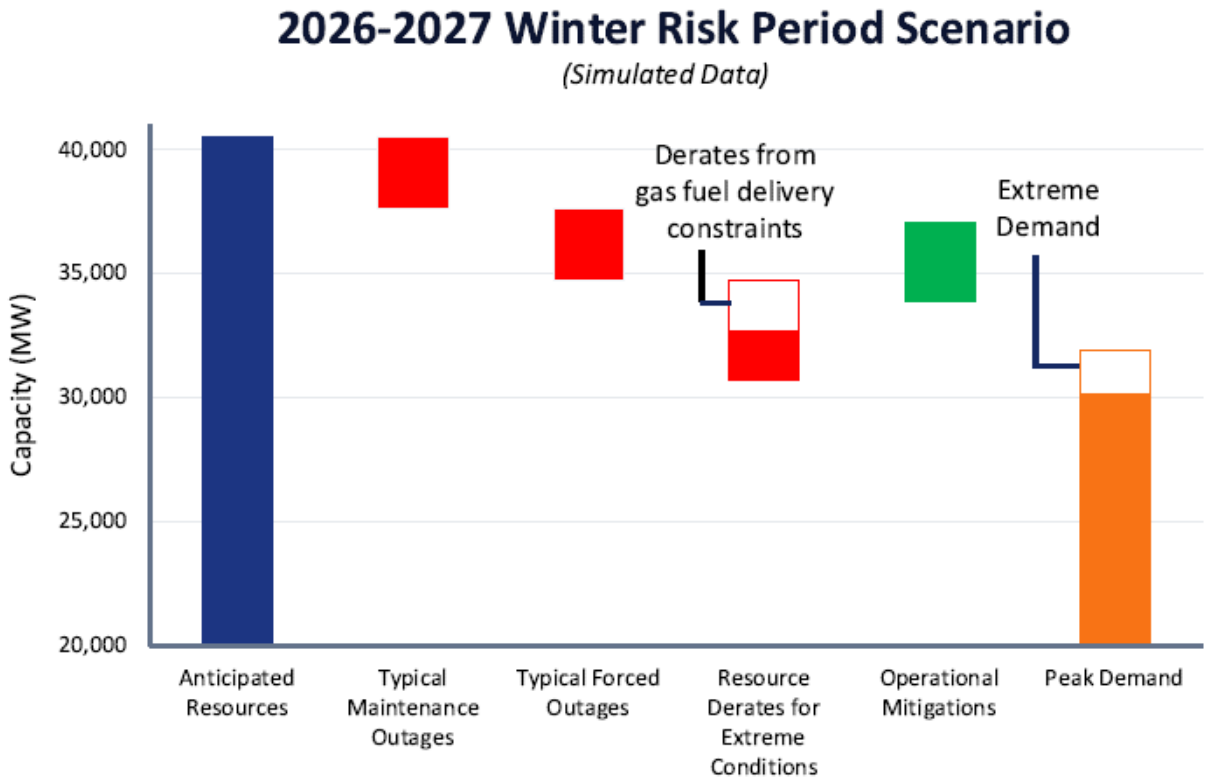
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Reliability Assessment and Performance Analysis

Incorporate gas infrastructure adequacy impacts into assessment studies

Winter Reliability Assessment

- Analyze data from NERC's Generating Availability Data System and the Energy Information Administration to develop a more precise outage profile for gas resources
- Map gas pipeline constraints across the continent to enhance awareness of tight supply conditions ahead of winter
- Survey regional entities on what percentage of their gas fleet has firm fuel supply arrangements for winter



Reliability Assessment and Performance Analysis

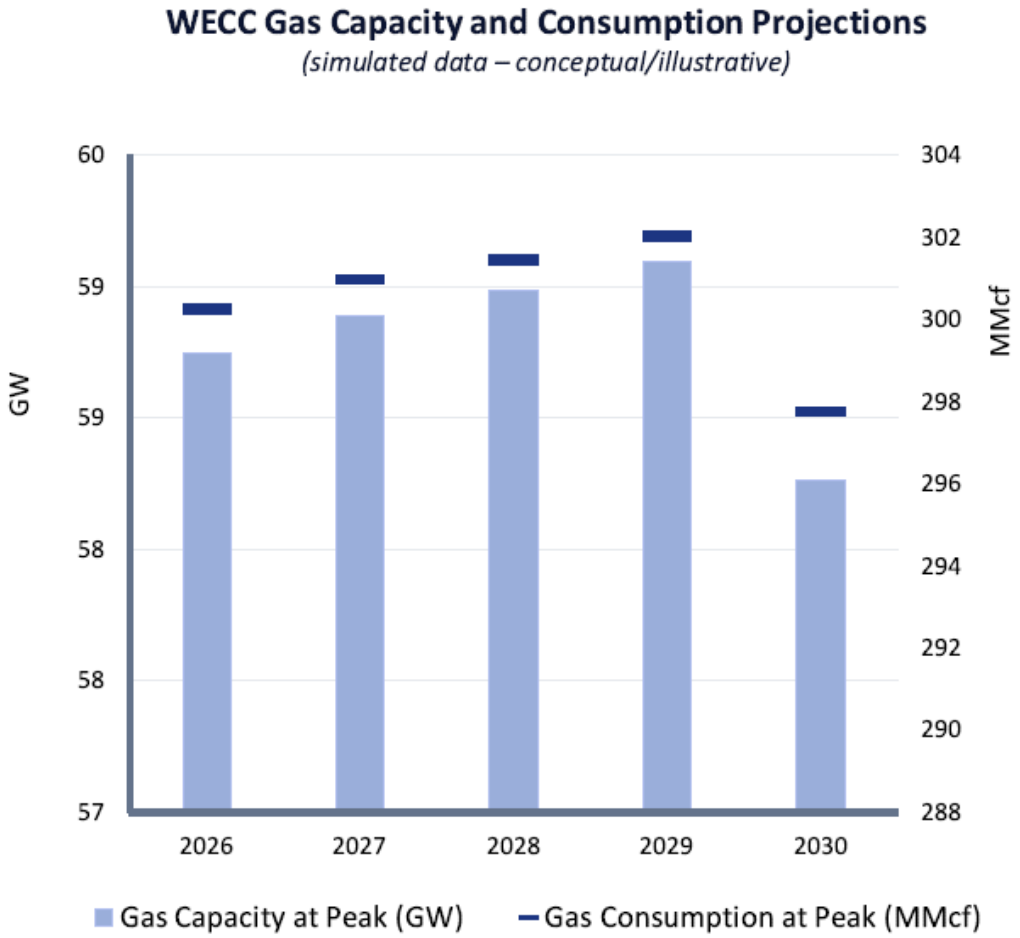
Incorporate gas infrastructure adequacy impacts into assessment studies

Long-Term Reliability Assessment

- Evaluate current and planned pipeline capacity available to supply anticipated generation demand
- Develop illustrations of natural gas fuel supply needs over the planning horizon (see example)

Other Assessment Work

- Collaborate with WECC to harmonize NERC analysis with insights from the WECC natural gas fuel availability study slated for 2027



Planning Energy Assurance Standard

Identify and Implement potential electric-gas enhancements to NERC Reliability Standards

Planning Energy Assurance Standard

- New Standard ERA-001 will help entities work together to assess risks, remove information gaps related to the state of the electric grid, and identify issues affecting their ability to deliver energy reliably.
- The Standard calls for Planning Coordinators, in cooperation with Resource Planners and Transmission Planners, to conduct long-term Energy Reliability Assessments (ERAs) at least every three years
- An ERA may evaluate natural gas delivery scenarios on a granular level to identify energy delivery issues – as it reviews the impact of fuel supply on resources
- Project 2024-02 Planning Energy Assurance is currently out for public comments and initial ballot through December 10, 2026

Other Potential Standard Projects and Guidance

Identify and Implement potential electric-gas enhancements to NERC Reliability Standards

- Examine Balancing Authority generation commitment and scheduling, which affect gas-electric coordination, including Operating Reserve-related requirements under various conditions
- Provide guidance on EOP-012-3 (Extreme Cold Weather Preparedness and Operations) exceptions and compliance expectations
- Implement Project 2022-03 Energy Assurance with Energy-Constrained Resources for Balancing Authorities for Near-Term Energy Reliability Assessments - currently awaiting FERC approval
- Share how TPL-001-5.1, Transmission System Planning Performance Requirements, includes consideration of generation loss on a common gas pipeline in its Table 1 – Steady State & Stability Performance Extreme Events

External Engagement & Communications

Engage industry and government agencies to drive action on relevant electric-gas coordination initiatives

Gas Industry

- Participate in **natural gas readiness forums**, laying the groundwork for further recommendations to be adopted by industry
- Engage with **gas industry trade associations**, with special focus on gas production and pipeline winterization practices
- Expand engagement with gas and electric industries to understand reliability risks specific to Canada

Broader Energy Industry

- **Collaborate with ISO/RTOs** and their electric/gas efforts
- Participate in **national laboratory studies** of natural gas system constraints and infrastructure needs
- Engage with **National Petroleum Council study** recommendation around embracing a comprehensive long-term planning electric-gas initiative

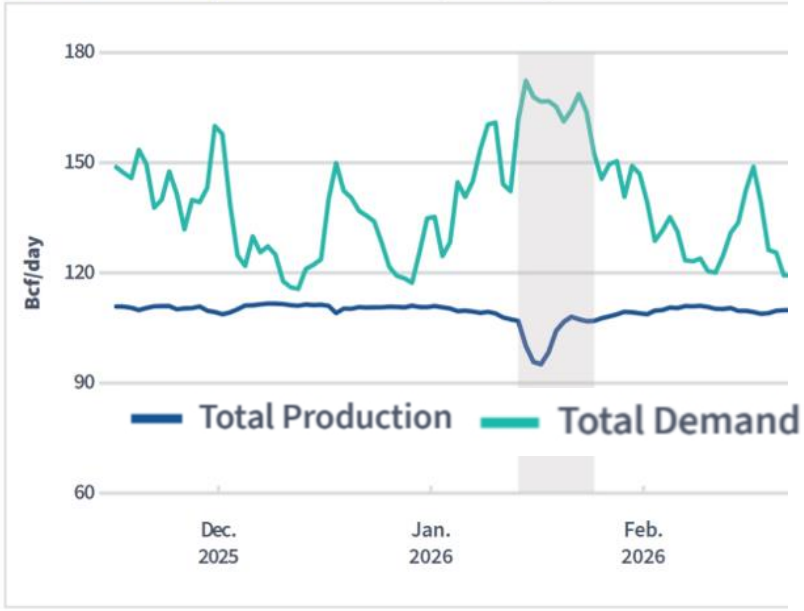
Communications

- NERC is consolidating relevant electric-gas initiatives on NERC.com, developing other media tools to extend outreach (see QR code below)

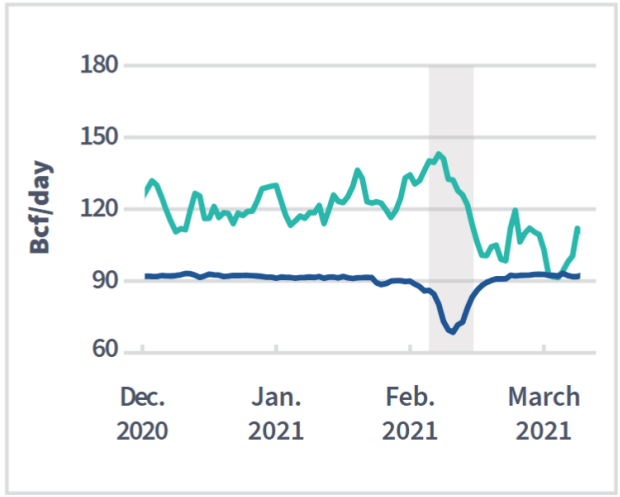
Electric–Gas Interdependence

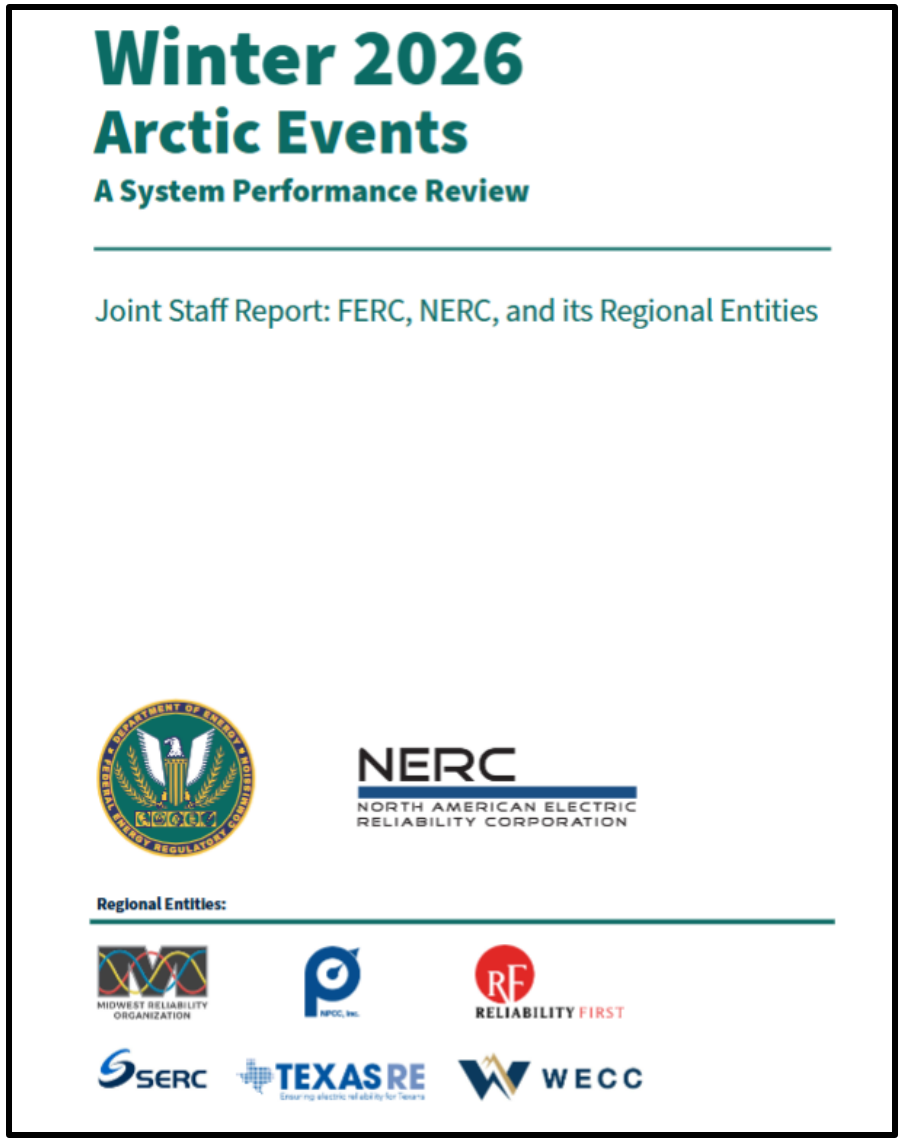
Ongoing Review of Winter System Performance

Winter 2025-26 (Winter Storm Fern/Gianna)



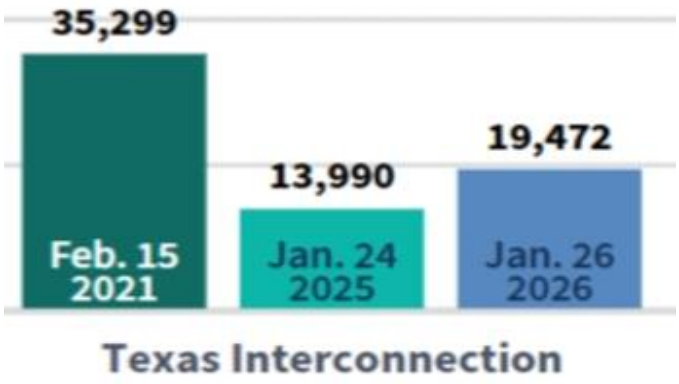
Winter 2020-21 (Winter Storm Uri)





The entire report may be viewed here

Largest Coincident Incremental Unplanned Generator Outage MWs





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Ensuring electric reliability for Texans