

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

2022 ERO Enterprise Work Plan Priorities

Board of Trustees Approved: November 4, 2021

RELIABILITY | RESILIENCE | SECURITY



1. Expand risk-based focus in Standards, Compliance Monitoring, and Enforcement
2. Assess and catalyze steps to mitigate known and emerging risks to reliability and security
3. Build a strong E-ISAC-based security capability
4. Strengthen engagement across the Reliability and Security Ecosystem in North America
5. Capture effectiveness, efficiency, and continuous improvement opportunities

- Improve BES resilience for wide-spread long-term extreme temperature events
- Deepen planning and operating focus beyond capacity adequacy, towards energy sufficiency
- Enhance and develop new Standards: cyber (bright-line criteria), weatherization, energy sufficiency and inverter performance
- Expand the impact of the E-ISAC through enhanced information sharing, communications, and monitoring of critical security threats

	2022 Key Objectives
1.	<p>Standards: Cyber</p> <ul style="list-style-type: none"> • Incorporate transmission planning and operational cyber risks into BPS Standards • Implement supply chain report recommendations • Complete evaluation of the bright-line risk criteria and change the criteria <p>Standards: Energy and Reliability</p> <ul style="list-style-type: none"> • Modify Reliability Standards based on actions identified by FERC/ERO Enterprise 2021 Cold Weather Inquiry • Implement 2021 Energy Reliability Assessment Task Force standard recommendations • Modify Standards ensuring transmission planning energy scenarios are studied for: <ul style="list-style-type: none"> ▪ Normal and extreme events* ▪ Gas-Electric Interdependencies ▪ Distributed energy resource events <p>Standards: Emergent Risks</p> <ul style="list-style-type: none"> • Modify existing NERC Reliability Standards: <ul style="list-style-type: none"> ▪ Inverter Performance ▪ Relay commissioning
2.	<p>Compliance</p> <ul style="list-style-type: none"> • Develop and implement plan to address facility ratings

* Includes extreme events creating common conditions that impact the energy resilience of the BPS, such as: extreme long-term, widespread cold and hot temperatures, widespread droughts in moisture, solar, wind, and fires.

2022 Key Objectives	
1.	<p>Assessment: Energy and Reliability</p> <ul style="list-style-type: none"> • Implement FERC/ERO Enterprise 2021 Cold Weather Inquiry (non-Standard actions) <ul style="list-style-type: none"> ▪ Reframing of resource adequacy in reliability assessments ▪ Approach to natural gas-electric interdependency on BPS reliability • Develop strategy for oversight of the transforming resource mix <ul style="list-style-type: none"> ▪ Seasonal Assessments to include energy availability scenarios and probability-based analysis to assess potential energy limitations from extreme events ▪ Conduct energy adequacy assessments for all assessment areas and publish in 2022 Long-Term Reliability Assessment ▪ Implement 2021 Energy Reliability Assessment Task Force recommendations ▪ To measure resilience, collect load loss recovery data from extreme events • Develop technical guidance to support increasing amounts of distributed energy resources and inverter-based resources
2.	<p>Assessment: Supply Chain and Security Engineering</p> <ul style="list-style-type: none"> • Implement Supply Chain report's recommendations • Supply chain risk mitigations for low impact BES Cyber Assets • Develop cybersecurity risk scenarios for BPS planning, engineering, and operations • Complete study on the implications of a coordinated cyber attack • Identify improvements to bright-line criteria or identify enhanced approach

2022 Key Objectives	
1.	<p>Strategy</p> <ul style="list-style-type: none"> • Execute and refine strategic plan • Develop OT system monitoring and analysis capabilities and activate the objectives of the 100 day plan • Continue collaboration with ARC (Analysis Center for Systemic Risk) to refine risk mitigation strategies • Continue sharing and engagement with other critical infrastructure sectors and ISACs • Maintain strategic partnerships with U.S. and Canadian government partners, technology sector, and other key stakeholders • Explore opportunities to expand participant funding of key programs
2.	<p>Information Sharing</p> <ul style="list-style-type: none"> • Maintain focus on and share information regarding the most critical security threats (i.e. OT, Supply Chain) • Develop plans to significantly expand CRISP participation and evaluate other sensor technologies • Improve coordination and connectivity to Intelligence Community • Continue to conduct threat workshops, webinars and industry-wide exercises
3.	<p>Analysis</p> <ul style="list-style-type: none"> • Develop products to summarize analysis of sensors and proactively share with stakeholders • Deploy automated information sharing tools • Refine performance metrics to more accurately assess productivity and value
4.	<p>Engagement</p> <ul style="list-style-type: none"> • Successfully roll out new E-ISAC portal and develop robust feedback mechanisms • Continue Industry Engagement Program and increase membership • Provide products and services tailored to small and mid-size systems • Continue to strengthen engagement and collaboration with natural gas sector • Maintain Canadian engagement, effectively activate the IESO relationship and use Project Lighthouse

2022 Key Objectives

- 1. Enhance outreach to stakeholder/policy organizations**
 - Continue to sharpen reliability assessment recommendations and further develop state and Provincial outreach around key findings in partnership with the Regional Entities
 - Continue to expand outreach to stakeholder organizations that represent resource transition mix (solar, wind, natural gas, battery technology, etc.) to further engage on reliability, resilience and security matters.

Cold Weather:

 - Execute a robust outreach strategy surrounding the recommended actions outlined Mid-South Cold weather event inquiry report in coordination with FERC to include 1) U.S. Senate and House Committees of Jurisdiction, 2) Stakeholder Associations, and 3) U.S. Government

- 2. Leverage the work of others**
 - Leverage renewed working relationships with EPRI and NATF and NAGF to expand joint impact
 - Look for other organizational relationships to leverage where joint impact on Bulk Power System reliability could be expanded through better coordination/intentionality such as US DOE, CAMPUT, Ministers of Energy, NARUC, and Power Systems Engineering in Research Center (PSERC), etc.)
 - Continue to develop relationships with registered entities through NERC and the Regions.

	2022 Key Objectives
1.	Align/SEL <ul style="list-style-type: none">• Roll-out Align R4 by Q3 2022, supported by stakeholder outreach and education, end-use training, and business unit readiness activities• Explore potential additional uses of Evidence Locker functionality for other registered entity data gathering (e.g., NERC Alerts)
2.	ERO Enterprise <ul style="list-style-type: none">• Solidify the ERO-Enterprise Transformation with increasing proof points per the Phase 2 Roadmap• Update long-term strategy to reflect the current industry reliability, security and resilience environment.