NERC

ERO 2019 Work Plan Priorities

Howard Gugel, Vice President and Director of Engineering and Standards Corporate Governance and Human Resources Committee Meeting October 31, 2019







RELIABILITY | ACCOUNTABILITY

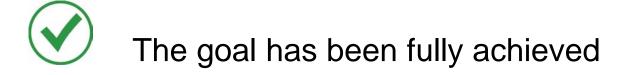




- 1. Risk-responsive Reliability Standards
- 2. Objective, risk-informed entity registration, compliance monitoring, mitigation, and enforcement
- 3. Reduction of known reliability risks
- 4. Identification and assessment of emerging reliability risks
- 5. Identification and reduction of cyber and physical security risks
- 6. Improving ERO Enterprise efficiency and effectiveness









The goal has been partially achieved and is on track for 2019 completion



The goal has been partially achieved but is off schedule for 2019 completion



The goal will not be reached in 2019 or the goal no longer applies



Goal 1: Risk-responsive Reliability Standards

Sub Goals

- 1. Complete Phase I of the Operating and Planning Standards Efficiency Review and seek FERC approval for sought after retirements.
- 2. Launch Phase II of the O&P Standards Efficiency Review
- 3. Initiate CIP Standards Efficiency Review and establish a process and timeline
- 4. Complete Supply Chain effort
 - Complete the final report and gain Board acceptance
 - Develop a plan to realize the recommendations in the report
 - Begin Plan Implementation
 - Develop a plan to evaluate the effectiveness of the supply chain standard

Status Through Q2

 Completed and filed with FERC on 6/7/2019



Completed – Phase
 II Launched Q 1



- In process expected to be complete by Q4
- Report accepted by BOT;
 recommendations
 expected to be
 complete by Q 4

NERC Goal 2: Risk-informed Entity Registration, NERC Monitoring, Mitigation, and Enforcement

Sub Goals

- 1. Complete certification and registration of the new Western Reliability Coordinators on-time, consistent with dissolution of Peak Reliability.
- 2. Review effectiveness of the Compliance Guidance program and develop plan to enhance; and evaluate opportunities to expand industry-led development of guidance to other program areas.
- Provide training and education on control evaluations to industry with supporting guidance to the Regional Entities for consistent implementation in audits.
- 4. Improve alignment in processes across Regional Entities and when appropriate, memorialize the aligned processes into CMEP Tool design.

Status Through Q3

RC transition timelines on track



- Project Plan developed
- Survey for participants launched Q3 2019
- Tracking completion by Q4



- RE training provided April
- Industry training provided at Standards and Compliance Workshop July



Continue the alignment of CMEP processes into CMEP Tool design



Goal 3: Reduction of Known Reliability Risks

Sub Goals

- 1. For the following BPS reliability risks identify the extent of condition, develop plan, and mitigate impacts from:
 - Protection system misoperations
 - Unacceptable inverter performance
 - Increased dependency on natural gas
 - Compromised situational awareness from the loss of Energy Management Systems
 - Distributed energy resources

Identification and syndication of best practices through new Reliability Guidelines and other tools, including enhancements to Reliability Standards.

2. Finalize business case and begin implementation of new SAFNR Tool

Status Through Q3



Complete:

- 2019 SOR
- DER-A Model
 Reliability Guideline –
 Distributed through
 NARUC to reach
 state-level
- IBR Performance Reliability Guideline
- EGWG Formed
- Monitoring and Situation Awareness Conference
- Fuel Assurance awaiting PC approval



- Implementation in progress and on target
- Tracking completion by Q4

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Goal 4: Identification and Assessment of Emerging Reliability Risks

Sub Goals

- 1. Develop and implement a plan to expand the consistent use of probabilistic based assessment processes for reliability assessments with common tools and practices.
- 2. Expand the 2020 Long Term Reliability Assessment to include considerations of energy assurance risks.
- 3. Scope out options and determine if work should be undertaken on the use of reserve margin targets given:
 - changing level of resource firmness,
 - uncertainty around actual loads due to DER expansion, and
 - recent experiences at managing tight reserve margins without incident.

Status Through Q2

- Probabilistic Assessment Working Group Technical Reference Document in development
- Tracking completion by Q4



- Plan in development for 2020 Probabilistic Assessment (Expected Unserved Energy Metric)
- Tracking completion by Q4



- Plan in development
- Tracking completion by Q4



Goal 5: Identification and Reduction of Cyber and Physical Security Risks

Sub Goals

- 1. Information Sharing:
 - Enhance data collection capabilities
 - Establish two way sharing of machine readable cyber indicators through the Cyber Automated Information Sharing System
 - Implement E-ISAC Watch 24 hours/5 days per week by executing hiring plan
- 2. Analysis: Increase the identification of indicators of compromise
- 3. Engagement:
 - Expand the Industry Engagement Program (IEP) and host minimum of 6 IEP sessions
 - Execute Canadian Engagement Strategy, and gain Canadian support for 2020 Business P&B
 - Develop plans to address key findings identified in the 2018 biennial Effectiveness Survey
 - Design and execute GridEx V



- MS-ISAC work progressing
- Long term data strategyproof of concept under development
- Industry CEO level outreach on industry information sharing
- 6 am-6pm on duty watch, off hours now on call; Q4 hiring off hours on duty staff;
- There were 371 indicators identified through August 30, 2019. (See Note 2)
- 5 IEPs to date. 1 in December
 - Kicked off IESO collaboration; developing work plans
 - Cross sector engagement with FSARC, MS-ISAC, ONG ISAC
 - GridEx V planning on track
 - DOE term sheet under negotiation
 - Tracking completion by Q4

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Goal 6: Improving ERO Enterprise Efficiency and Effectiveness

Sub Goals

1. NERC:

- Develop and implement meeting and travel policy to support NERC stakeholder groups
- Finish the 2019 year at or below budget and maintain at least 3 MM in operating reserves
- Develop plans to address key findings from the 2018 biennial Effectiveness survey
- Work with MEC to develop metrics measuring the effectiveness of the E-ISAC
- 2. ERO Enterprise Coordination initiatives:
 - Meet all milestones on CMEP tool development
 - Evaluate opportunities to centralize and/or standardize processes
 - Develop and implement meeting and travel policy for ERO Enterprise Working Groups
- 3. Stakeholder Engagement:
 - Develop and implement plan to reconceive technical committees to a lower cost model that preserves/improves effectiveness

Status Through Q3

- Current activities and action plans to address key findings from the 2018 biennial effectiveness survey included in the <u>Summary of Results</u>.
- Tracking completion by Q4



- CORES -a managed launch is in progress for select registered entities before full release.
- Align release 1 paused
- Meeting and travel policy developed



Reliability and Security Technical Committee



Questions and Answers