

# NERC

NORTH AMERICAN ELECTRIC  
RELIABILITY CORPORATION

# ERO Enterprise and Corporate Metrics

First Quarter Status

Corporate Governance and Human Resources Committee Meeting  
May 4, 2017

**RELIABILITY | ACCOUNTABILITY**



- **Metric 1:** Fewer, less severe events
  - No Category 3–5 events (Target 1)
  - eSRI for Category 1–3 events currently calculated to be negative\* (Target 2)
- **Metric 2:** No gaps in Reliability Standards and compliance monitoring
  - No Category 3 events occurred in Q1 (Threshold)
  - Target is zero gaps; will be reported at year-end based on gap analyses

\*With a rolling 5 year calculation, the slope of the line is shown to be negative, but not statistically significant. Excludes weather-driven events and AESO Islanding.

- **Metric 3:** Resource deficiencies are foreseen
  - No firm load outages over 300 MW (Threshold 1) or EEA-3s (Target 1) due to lack of resources.
- **Metric 4:** Number of unauthorized physical or cyber security access events resulting in disruption to Bulk Electric System (BES) facilities
  - No disruption of the operations of the BES from cyber attack (Target 1)
  - No firm load shed more than 100 MW due to physical attack (Threshold 2)
  - Developing trend data for physical security events (Target 2)

- **Metric 5: Reduced reliability risk from noncompliance**
  - Calculations and baselines to be reported to the BOTCC in November for:
    - Compliance severity index (Targets 1-2)
    - Repeat moderate and severe risk trends (Target 4)
  - 90% of noncompliance self-identified (Target 3)
  - Mitigation completion rates:

	Threshold 4	Target 5	% MP in progress	% Mitigation Completed
2016	70%	75%	60.4%	39.6%
2015	85%	90%	5.5%	94.5%
2014 & Older	99%	100%	0.6%	99.4%

- **Metric 6: Reduced risks in targeted areas**
  - 6a - Events caused by generating unit forced outages due to cold weather
    - No firm load shed from forced unit outages caused by cold weather (Threshold)
    - Each Region's 10 coldest days being gathered for 5-year EFOR benchmark; results will be prepared starting in Q3 (Target)
  - 6b - Annual misoperations rate of performance
    - Data for most recent quarter will be included in the State of Reliability report
    - Annual Misoperations report will be provided at the end of the year
  - 6e - Number of transmission line outages due to vegetation
    - Quarterly vegetation management report available starting in Q2

- **Metric 7: NERC's efficiency and effectiveness**
  - 7b - Implementation of ERO Enterprise technology solutions
    - Planned Enterprise IT applications on track (Target 1)
    - Cost benefit measure development on schedule (Target 2)
  - 7c - Implementation of the Regional Entity oversight plans and NERC adherence to the Rules of Procedure
    - Implementation of 2016 audit findings on track (Target 1)
    - NERC's oversight of the Regional Entities on track per oversight plans (Target 2)

- **Metric 6: Reduced risks in targeted areas**
  - 6c - Number of automatic AC transmission outages caused by human error
    - Cause of an event is being investigated; root-cause not yet determined (Threshold 1)
    - Trending for 2017 will begin in Q3 (Targets 1 and 2)
  - 6d - Number of transmission outages due to AC substation equipment failures
    - Cause of an event is being investigated; root-cause not yet determined (Threshold 1)
    - Trending for 2017 will begin in Q3 (Targets 1 and 2)

- **Metric 7: NERC's efficiency and effectiveness**
  - 7a - Execution of business plan and budget
    - Projecting year end negative budget variance (<1%) inclusive of reserves (Target 1)
  - 7d - Implementation of action plans in response to ERO Enterprise Effectiveness Survey results
    - Cost effectiveness project schedule modified to accommodate policy input



- E-ISAC Member Executive Committee (MEC) Strategic Plan
- Distributed Energy Resources report
- Inverter Task Force stood up
- Gap analysis of low-category events
- Outreach and Coordination
  - Reliability Leadership Summit
  - Cyber Risk Preparedness Assessment Workshop
  - Joint NERC-NATF Human Performance Conference
  - Regional workshops: internal controls, risk assessments, and misoperations
  - ERO Enterprise Compliance and Enforcement Workshop
  - Multimedia on Event Analysis; Two lessons-learned
  - National Association of Regulatory Utility Commissioners (NARUC)

- Downstream Natural Gas (DNG)-ISAC partnership
- Inverter technical report, Standard gap analysis, and NERC Alert
- State of Reliability Report and Summer Reliability Assessment
- Frequency response study
- Develop trend data for Metric 4: cyber and physical security
- Select events for Metric 2: No gaps in Reliability Standards and compliance monitoring
- Outreach and Coordination
  - NERC-NATF Technical Workshop on Power System Modeling
  - Regional Entity Workshops focused on reliability improvement
  - Internet of Things security workshop
  - Unclassified threat workshop



# Questions and Answers