

NERC RELIABILITY ASSURANCE INITIATIVE (RAI)

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Today's Presentation

- Ontario Compliance Framework for NERC Reliability Standards
- Evolving NERC Compliance Monitoring and Enforcement Framework
- Impacts for the IESO

Ontario Compliance Framework for NERC Reliability Standards

- The IESO and Ontario Market Participants are subject to all applicable NERC standard requirements based on their functional role(s) on the bulk electric system:

IESO Roles:

- Reliability Coordinator
- Balancing Authority
- Transmission Operator
- Transmission Service Provider
- Interchange Coordinator
- Planning Coordinator
- Transmission Planner
- Resource Planner

Market Participants Roles:

- Generator Owner
 - Generator Operator
- Transmission Owner
- Distribution Provider
- Purchase Selling Entity
- Load-Serving Entity

Ontario Compliance Framework for NERC Reliability Standards

- IESO is sole entity in Ontario accountable to NERC for compliance with reliability standards
- Ontario market participants are accountable to the IESO (MACD) for compliance with NERC reliability standards
- Only MACD can impose financial penalties to the IESO and Market Participants for violations of NERC reliability standards

Scope of IESO's Compliance

- The IESO is accountable for over 1,000 reliability standard requirements and criteria.
- The IESO must be able to demonstrate continuous compliance as it is subject to a rigorous compliance framework:
 - Numerous compliance assessments throughout the year (spot checks, self-certifications)
 - Mandatory on-site comprehensive audit every 3 years due to the importance of its functional roles on the bulk power system
 - All potential violations, regardless of severity, must be identified, reported and addressed (self-reports)
 - All confirmed violations are subject to possible financial penalties and corrective action plans

Challenges to Current NERC Compliance Monitoring and Enforcement Approach

- Some functions may have minimal impact on reliability, yet they must follow all NERC Reliability Standard requirements according to function, regardless of reliability impacts.
- NERC has been using a “zero tolerance” approach to its compliance monitoring and enforcement. This means, that all findings and violations are monitored and administered to the same degree regardless of risk to the BES.

This approach is not practical, effective or sustainable.

Evolving NERC Compliance Monitoring and Enforcement (CMEP) Framework

- NERC launched the Reliability Assurance Initiative (RAI) to incorporate risk-based concepts:
 - Risk-Based Registration
 - Enhances registry criteria to better align NERC standard compliance with risk to the Bulk Electric System reliability
 - Risk-Based Compliance Monitoring
 - Customized compliance oversight plan for each registered entity based on Inherent Risk Assessment and Internal Control Evaluation
 - Risk-Based Enforcement
 - Compliance Exceptions
 - Self-Logging

Risk-Based Registration

- IESO's Applicability Criteria is akin to NERC's Compliance Registry:
 - Applies to Ontario Market Participants
 - Largely consistent with NERC's compliance registry
 - Long before NERC adopted its Risk-Based Registration, the IESO had adopted a similar risk-based approach to its applicability criteria.
- NERC is currently considering the development of a "tier" system - subset of Reliability Standards obligations for:
 - Small generators
 - Low risk category for Transmission Owner and Transmission Operator (TOP) (e.g., BES generation, no black-start units, no cranking path, etc...)

Risk-Based Compliance Monitoring and Enforcement

- Beginning in 2015, the depth and breadth of NERC's Compliance Monitoring will now depend on a registered entity's:
 - **Inherent Risk Assessment (IRA)**
 - looks at the potential risk posed by an individual registered entity to the reliability of the Bulk Electric System (i.e., existence of SPS, number of interconnection points, etc...)
 - **Internal Control Evaluation (ICE)**
 - looks at the internal controls an individual registered entity has in place to mitigate the risks identified in the IRA
- NERC is also introducing **Compliance Exceptions** and **Self-Logging** in lieu of self-reports for minimal risk non-compliance instances

Impacts for the IESO

- As a result of IRA and ICE, NERC's scope of IESO's compliance monitoring scope will change
 - May impact the volume of Reliability Standards applicable to the IESO
 - Must always be “audit-ready” as risk-based monitoring may be more random
- Expect ICE to be an integral part of IESO future audits as NERC's risk-based CMEP matures
- IESO may qualify for Self-Logging and Compliance Exceptions
- MACD will assess extent of NERC RAI concepts to its current framework