

# NERC RELIABILITY ASSURANCE INITIATIVE (RAI)

David Robitaille  
Manager, Operational Effectiveness

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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