



# What Wind Power Operators Need to Know About NERC Compliance

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# Summary

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- Overview of Reliability Standards
- Registration & Operational Issues
- Enforcement
- Lessons and Best Practices

# Overview of Mandatory Reliability Standards



## Legal Framework

- **FERC:** The ultimate arbiter of approving and enforcing reliability standards
- **NERC:** FERC certified NERC as the Electric Reliability Organization to develop, monitor, and enforce reliability standards
- **REGIONAL ENTITIES:** NERC delegated some authority to monitor and enforce compliance to 8 regional entities

# Overview of Mandatory Reliability Standards

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## Identifying and Complying with Mandatory Reliability Standards

- **Compliance Registry:**

- Registration depends on function classification
- Applicability of Functional Category and/or “material impact on the reliability of the Bulk Power System”
- Once operators register, they are subject to standards and have compliance obligations

# Registration Issues



Should wind generators register as Generator Owner, Generator Operator, Purchasing-Selling Entity – or at all?

- Assessing material impact to the bulk power system
- Ambiguity in the definition of Purchasing-Selling Entity
- Overlapping responsibilities
  - Can be addressed by:
    - Contractual arrangements
    - Joint registration

# Registration Issues

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NERC has registered owners of interconnection tie lines as Transmission Owners and Transmission Operators

- 4-mile, 345 kV double-circuit and 1-mile 345 kV single circuit line (Kiowa Power Partners, LLC)
- 75-mile 345 kV line (Western Farmers Electric Cooperative)
- 26-mile 500 kV line (New Harquahala Generating Company, LLC)

# Wind Generators and Critical Infrastructure Security Standards



## ■ Applicability of Critical Infrastructure Security (CIP) Standards

- CIP-003 through CIP-009 pending FERC final approval
- Whether and how CIP standards apply to intermittent resources

## ■ Risk-Based Analysis to Determine:

- Whether the CIP Standards Apply
  - What qualifies as a "Critical Asset"?
  - How is a proper risk-based methodology developed?
  - How is a proper risk-based analysis performed?
- What Compliance Steps Are Needed

# Wind Generators and Critical Infrastructure Security Standards

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## Guidance, Tools and Techniques for Risk Assessment

- Edison Electric Institute Security Committee's approach to assessing risk and vulnerability of key facilities
- U.S. Department of Energy Vulnerability and Risk Assessment Program
- Electric Power Research Institute's Security Vulnerability Self-Assessment Guidelines for the Electric Power Industry

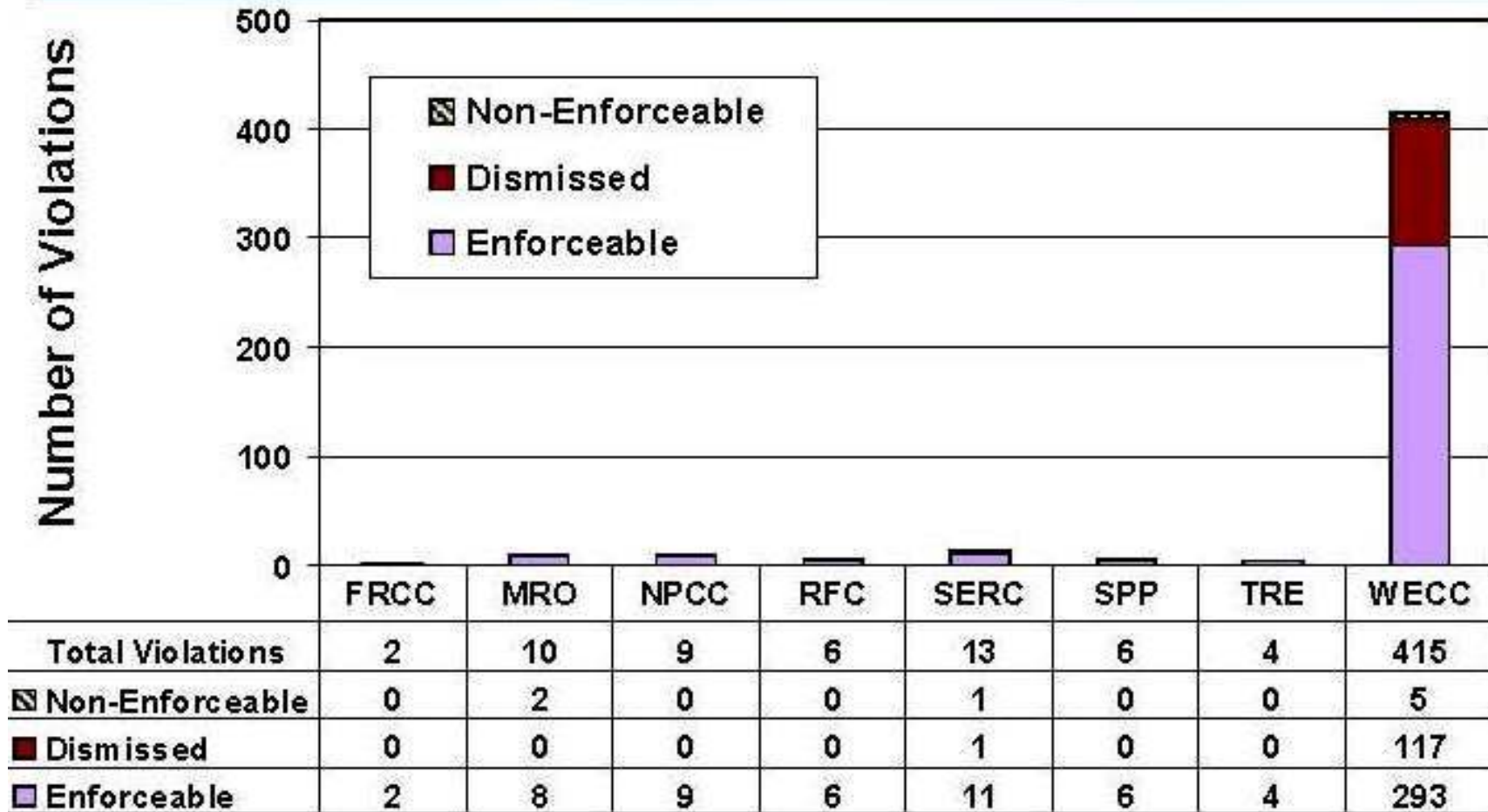
# Lessons from Enforcement



## Potential “triggers” for enforcement actions

- Compliance audits
- Self-certification
- Spot-checking
- Investigation of violations
- Self-reporting
- Periodic data submittals
- Exception reporting
- Complaints

# Post June 18 Violations



\*Source - NERC

# Lessons from Enforcement

Potential penalties (base daily amount)

Violation Risk Factor	Violation Severity Level							
	Lower		Moderate		High		Severe	
	Range Limits		Range Limits		Range Limits		Range Limits	
	Low	High	Low	High	Low	High	Low	High
Lower	\$1,000	\$3,000	\$2,000	\$7,500	\$3,000	\$15,000	\$5,000	\$25,000
Medium	\$2,000	\$30,000	\$4,000	\$100,000	\$6,000	\$200,000	\$10,000	\$335,000
High	\$4,000	\$125,000	\$8,000	\$300,000	\$12,000	\$625,000	\$20,000	\$1,000,000

# Lessons from Enforcement

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- **Lessons learned from early compliance audits**
- **Record-keeping best practices**
- **Keys to demonstrating a “culture of compliance”**

# Lessons from Enforcement

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## Lessons learned from early compliance audits

- Document the details
- Document the negative
- Log communication of updates of standards to appropriate personnel
- Record training and communications with other responsible entities

# Lessons from Enforcement

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## Record-keeping best practices

- Create an audit trail
- Creation or modification date of documentation
- Quality control over documentation

# Lessons from Enforcement

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## **Demonstrate a “culture of compliance”**

- Develop a formal internal compliance plan that is well-documented, widely disseminated within the company, and supervised by an officer or other high-ranking official
- Periodic review and modification to compliance plan
- Employee training: New hires and refresher training
- Ongoing process for auditing compliance
- Self-reporting
- Cooperation



For more information

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