

**NERC**

NORTH AMERICAN ELECTRIC  
RELIABILITY CORPORATION

# State of Reliability Report

Preview of Key Findings

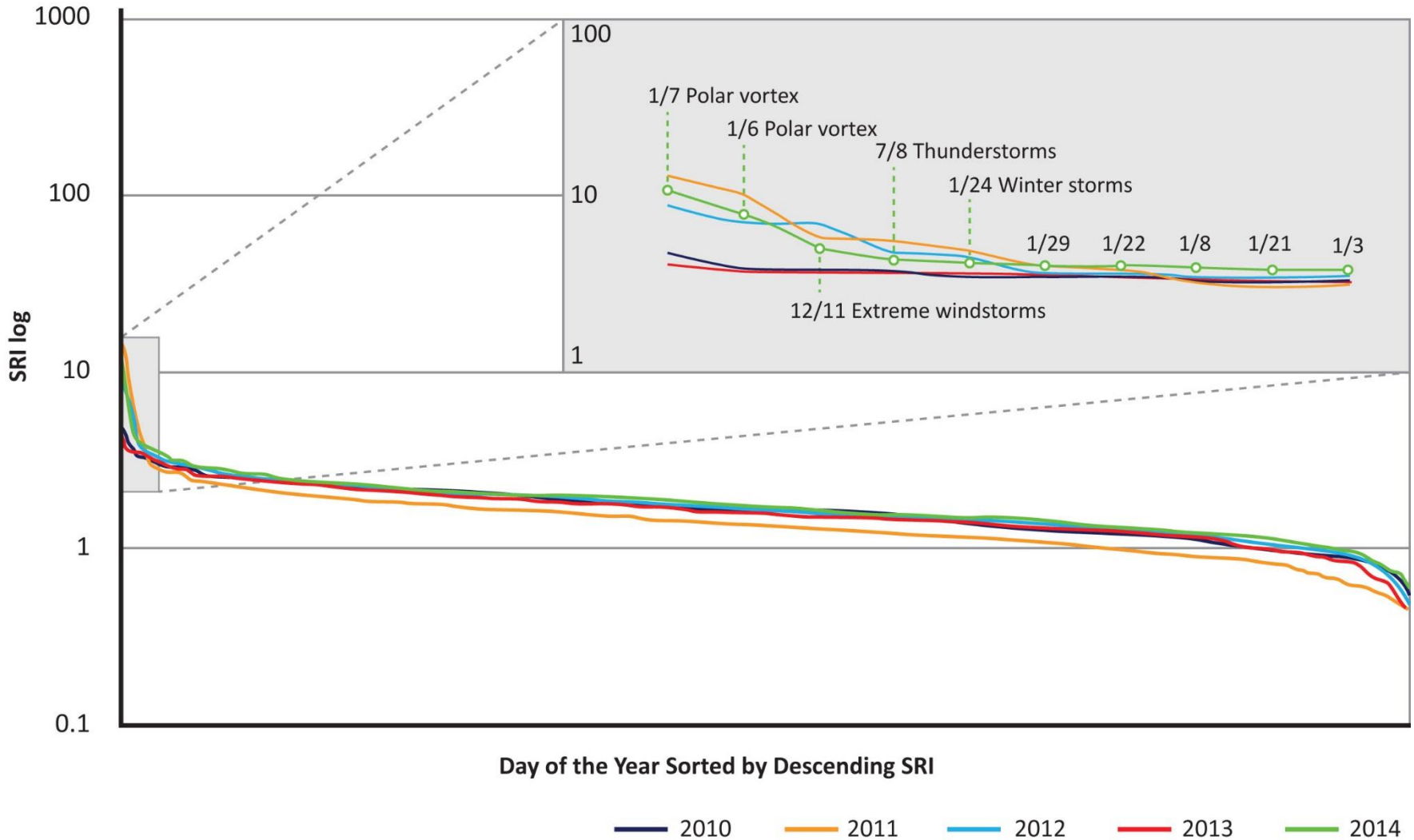
Mark Lauby, Senior Vice President and Chief Reliability Officer

**RELIABILITY | ACCOUNTABILITY**

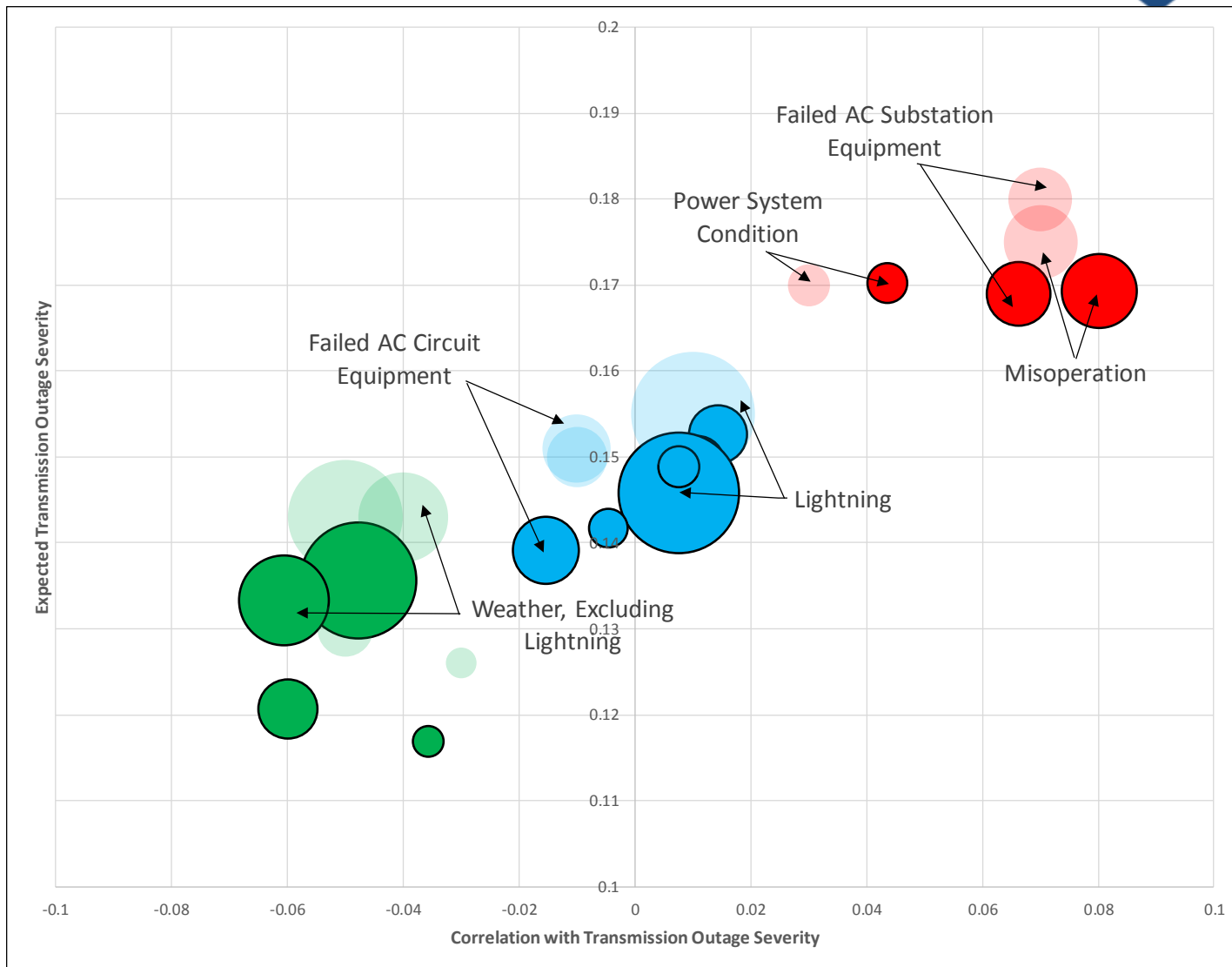


- Excluding weather, the bulk-power system (BPS) remains within Adequate Level of Reliability (ALR) objectives
  - Weather continues to stress BPS reliability
- No load loss due to cyber or physical security events
- Average transmission outage severity declined
- Significant decrease in transmission forced outages resulting in loss of load
- Stable frequency response trend
- Increased risk in protection system misoperations
- Continued decline in Energy Emergency Alert Level 3

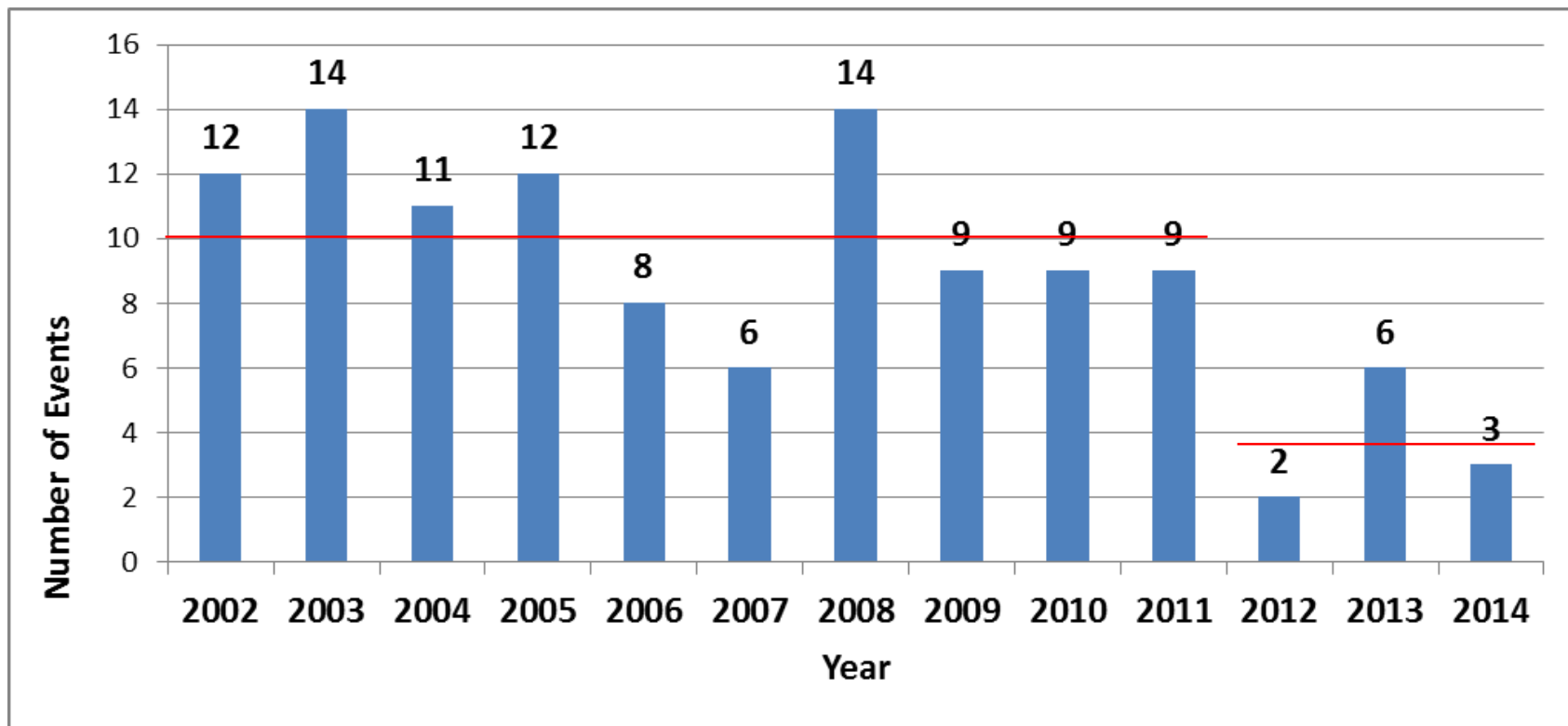
# Weather Stresses BPS Reliability



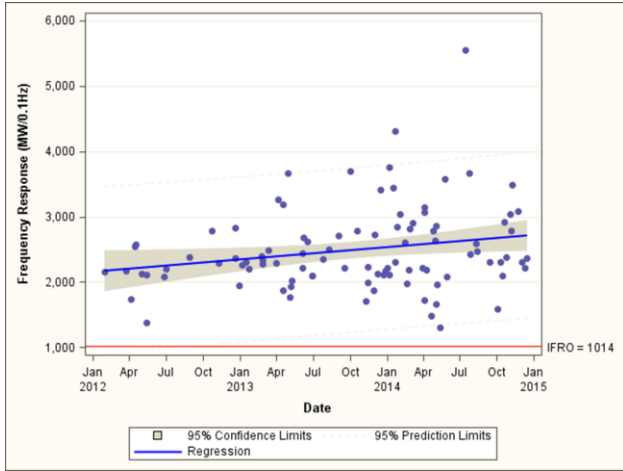
# Continued Decline in Average Transmission Outage Severity



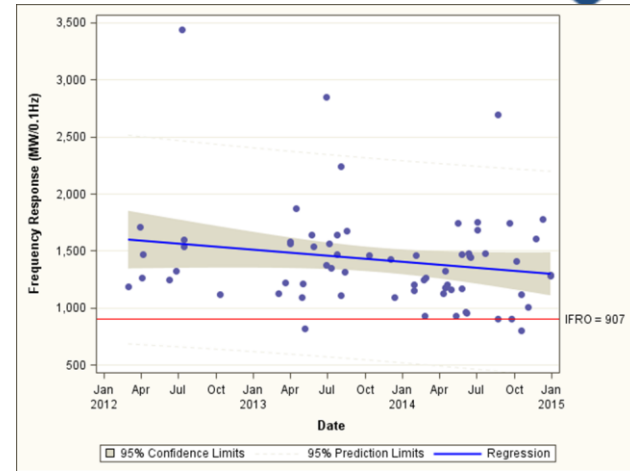
# Significant Decrease in Forced Transmission Outages Resulting in Loss of Load



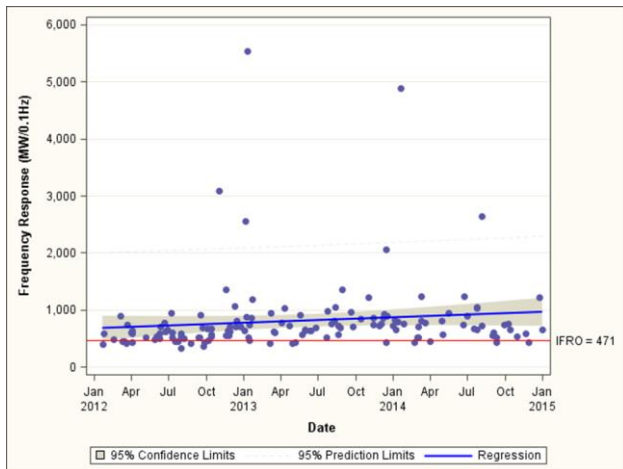
# Frequency Response Trend Stable



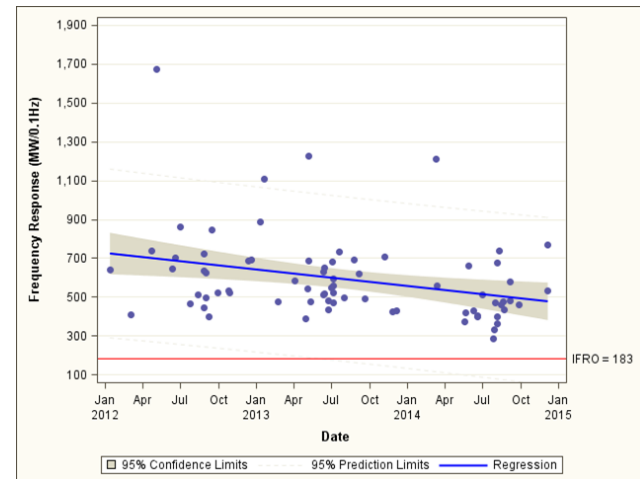
*Eastern Interconnection*



*Western Interconnection*



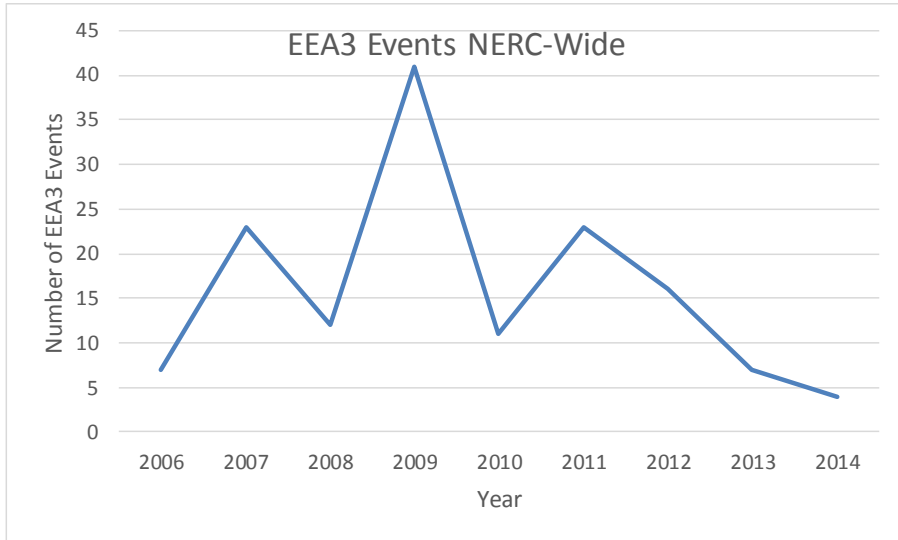
*ERCOT Interconnection*



*Québec Interconnection*

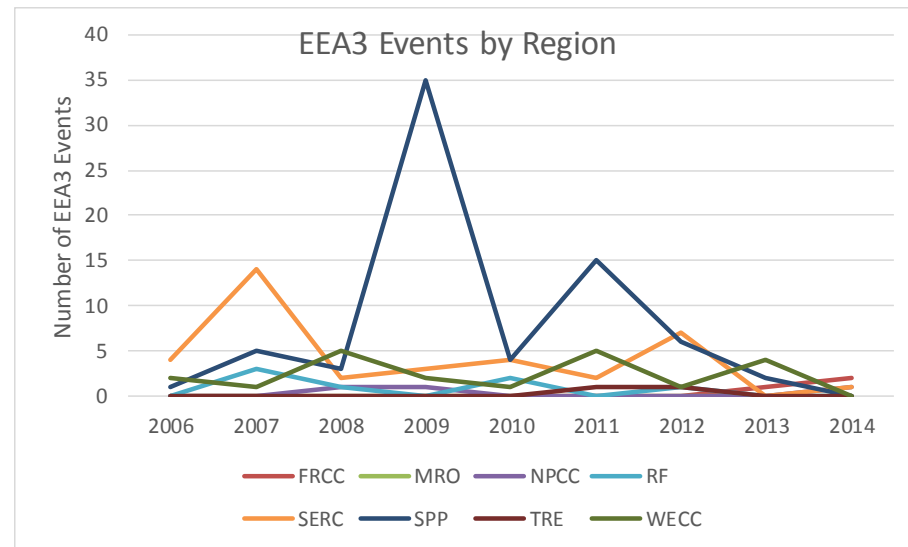
- **BES Security Metric 1: Reportable Cyber Security Incidents**
  - 3 Reportable Cyber Security Incidents in 2014
  - None resulted in loss of load
- **BES Security Metric 2: Reportable Physical Security Events**
  - 47 reports of physical security threat events
  - 9 caused physical damage or destruction
  - None resulted in loss of load

# Use of EEA Level 3 Continues to Decline



Steady decline NERC-wide since 2011

Overall regional rate declining







# Questions and Answers