

NERC and ERO Enterprise IT Projects Update

Stan Hoptroff, Vice President and Chief Technology Officer
Standards Oversight and Technology Committee
August 4, 2016

RELIABILITY | ACCOUNTABILITY



- ERO Enterprise IT Strategy
- ERO Enterprise IT Projects Update
- E-ISAC IT Projects Update
- NERC Corporate IT Projects
- 2016–2017 Major Ongoing Initiatives

- Disciplined approach to IT investment with a focus on desired business outcomes
- Execute four complimentary roadmaps:
 - Collaboration and Information Sharing – MS SharePoint
 - Data and Analytics – Enterprise Reporting
 - Standards and Compliance – CMEP Technology
 - Entity Information and Communication – MS xRM
- Focus on three clients:
 - ERO Enterprise Applications
 - Supporting both NERC and Regional Entity operations
 - E-ISAC
 - NERC Corporate IT needs

- Misoperation Data Capture ✓
 - 1600 Data Request
- User Management and Registration (ERO Applications)
 - Improve client experience, reduce complexity, and reduce support risk
- Enterprise Reporting – Generation Data
 - Enable ERO data access and analysis
- GADS – Wind Turbine Generation
 - 1600 Data Request
- Events Analysis – 2016 Enhancement ✓
- Compliance Monitoring and Enforcement Program (CMEP)
 - Steering Committee active, vendor education and professional services interviews underway

- E-ISAC Network Segmentation ✓
 - Implementation of controls in support of separation protocol
- E-ISAC Portal Enhancements and Support
 - Members Executive Committee requested features and improvements are underway
- Cybersecurity Risk Information Sharing Program (CRISP) Data Management Tools Evaluation & Support
 - Analysis strategy and options are under development
- E-ISAC Cybersecurity Automation
 - Implementation of Machine-to-Machine communications pilot (STIX/TAXII)

- Document Management Program
 - Document control, retention, security, and collaboration
- Audio/Visual Program
 - Ease of use, security, reliability, and reduced travel
- Information Security
 - Email Encryption
 - Network Architecture update

- Public Website Enhancements – Registered Entities
- Registration Application – Registered Entities
- Alerts and Notifications Application – Registered Entities
- CMEP Application
- Enterprise Reporting – Additional data to be loaded
- E-ISAC Portal Platform
- E-ISAC Cybersecurity Automation
- CRISP Analytical Capabilities



Questions and Answers

Reliability Standards Quarterly Status Report

Howard Gugel, Senior Director of Standards and Education
Standards Oversight and Technology Committee Meeting
August 4, 2016

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	Pre-2013 Directives*	Post 2012 Directives*	Total
Issued prior to year-end 2012	191		
Issued since year-end 2012		62	
Resolved as of June 30, 2015	184	50	
Remaining	7	12	19

*Does not include directives for other NERC departments

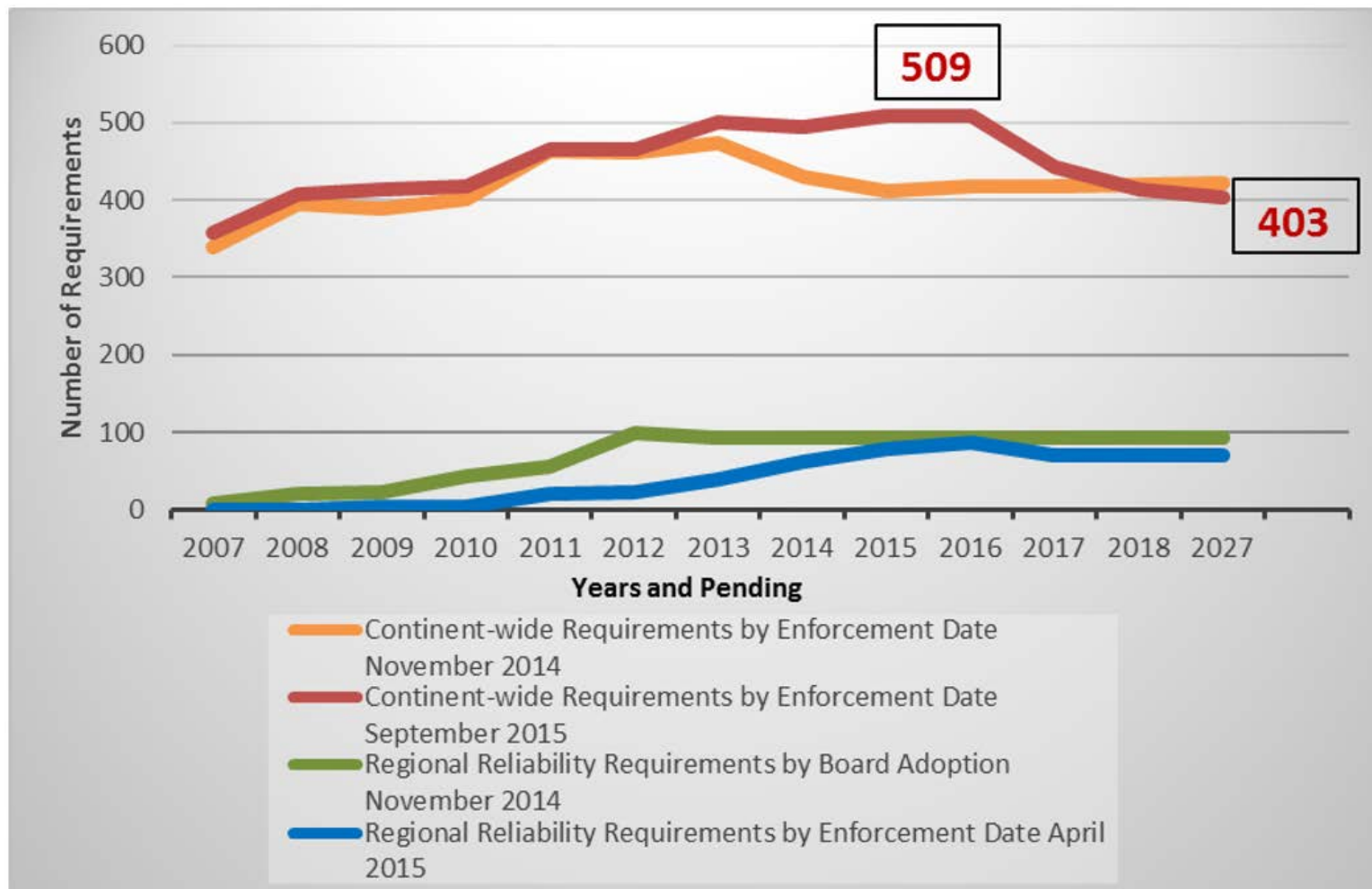
	Current Status	P81 and IERP Recommendations for Retirement
Total*		281
Addressed	238	
In current projects	35	
Not assigned	8	

*Unique requirements

Resolution	Number	Percent
Retired	110	46%
Modified	103	43%
Retained	25	11%
Total	238	

- August (2 planned)
- November (2 planned)
- February 2017 (3 planned)
- May 2017 (none planned)

Trend for Number of Requirements



- Status of 2017-2019 Reliability Standards Development Plan (RSDP)
- Progress on Standards metric (grading)
- Enhancements to Project Tracking Spreadsheet tool posted to NERC web site



Questions and Answers