

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Reliability Standards Development Plan: 2011-2013

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Reliability Standards Development Plan Webinar

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to ensure
the reliability of the
bulk power system

Today's Webinar

- Project Overview
- Summary of Changes
- Standards Processes Manual
- Transition to Results-based Reliability Standards
- Project Prioritization
- Location of Documents
- Q & A

Project Overview

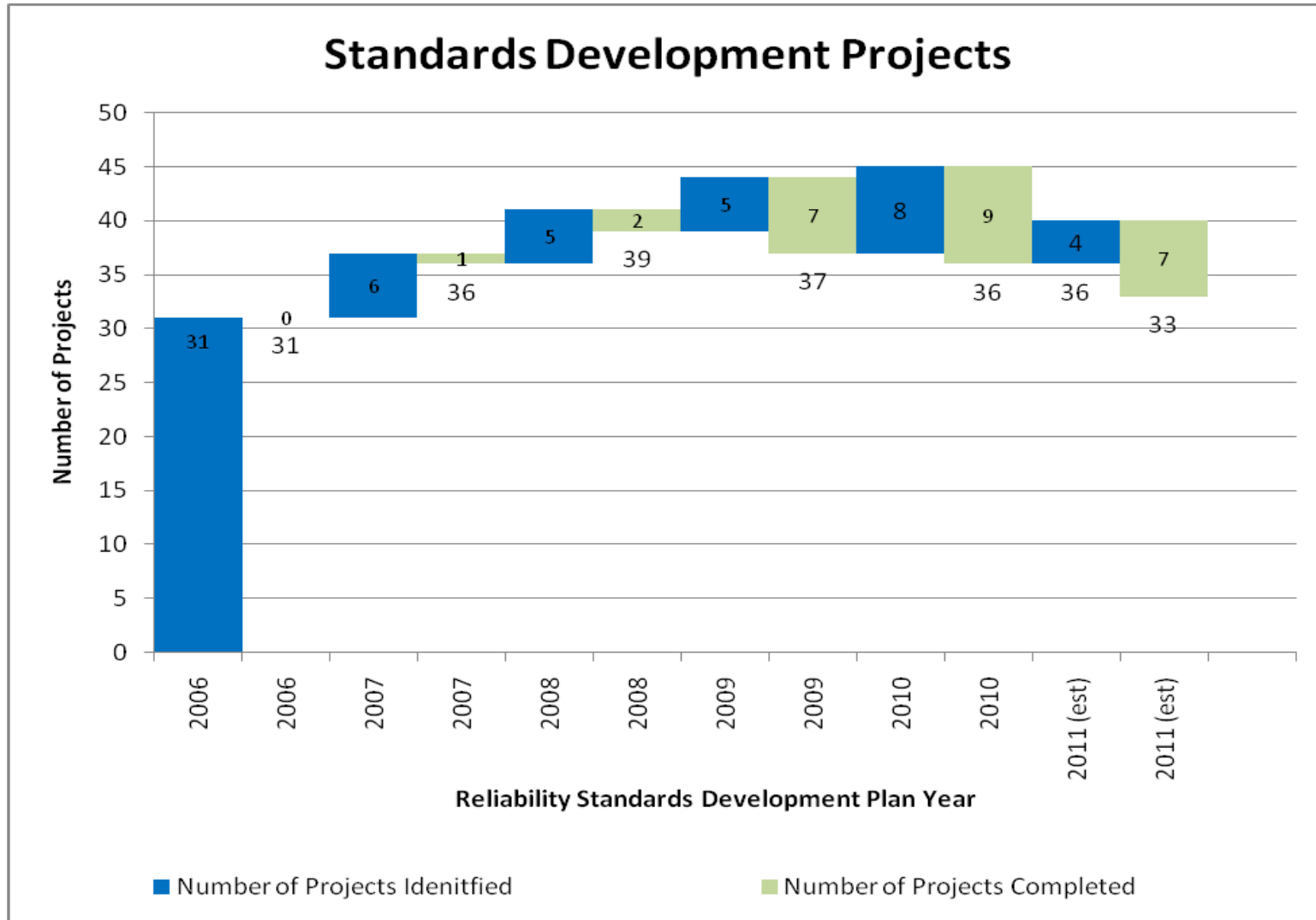
- Annual project for revising Reliability Standard Development Plan
- Serves as the foundation for NERC's standards development efforts for the immediate three-year horizon
 - Communicates vision
 - Prioritizes and coordinates
 - revision or retirement of existing reliability standards
 - development of new reliability standards
- Seeking industry comment on the draft Reliability Standards Development Plan: 2011-2013

- Input:
 - Industry stakeholders
 - NERC Technical Committees
 - Standards Committee Ad Hoc group
 - NERC staff
- Draft plan is currently posted for industry comment thru September 16
- Revise plan based on industry comments received
- Present to Standards Committee in October for approval
- Present to Board of Trustees in November for approval
- File with regulatory authorities before year's end

Summary of Changes

- Major overhaul
- Considered comments resulting from July 6, 2010 FERC Technical Conference on standards development
- Embraced prioritization tool developed by NERC Standards Committee Process Subcommittee
- Embraced transition plan for results-based reliability standards

Summary of Changes



- Filed on June 10, 2010 with FERC
- Provides added tools to SDTs:
 - Informal comment periods
 - Formal quality reviews
 - Successive ballots
 - Concurrent formal commenting and balloting
- Once approved replaces the Reliability Standards Development Procedure
- Will coordinate implementation of tools with Standards Committee

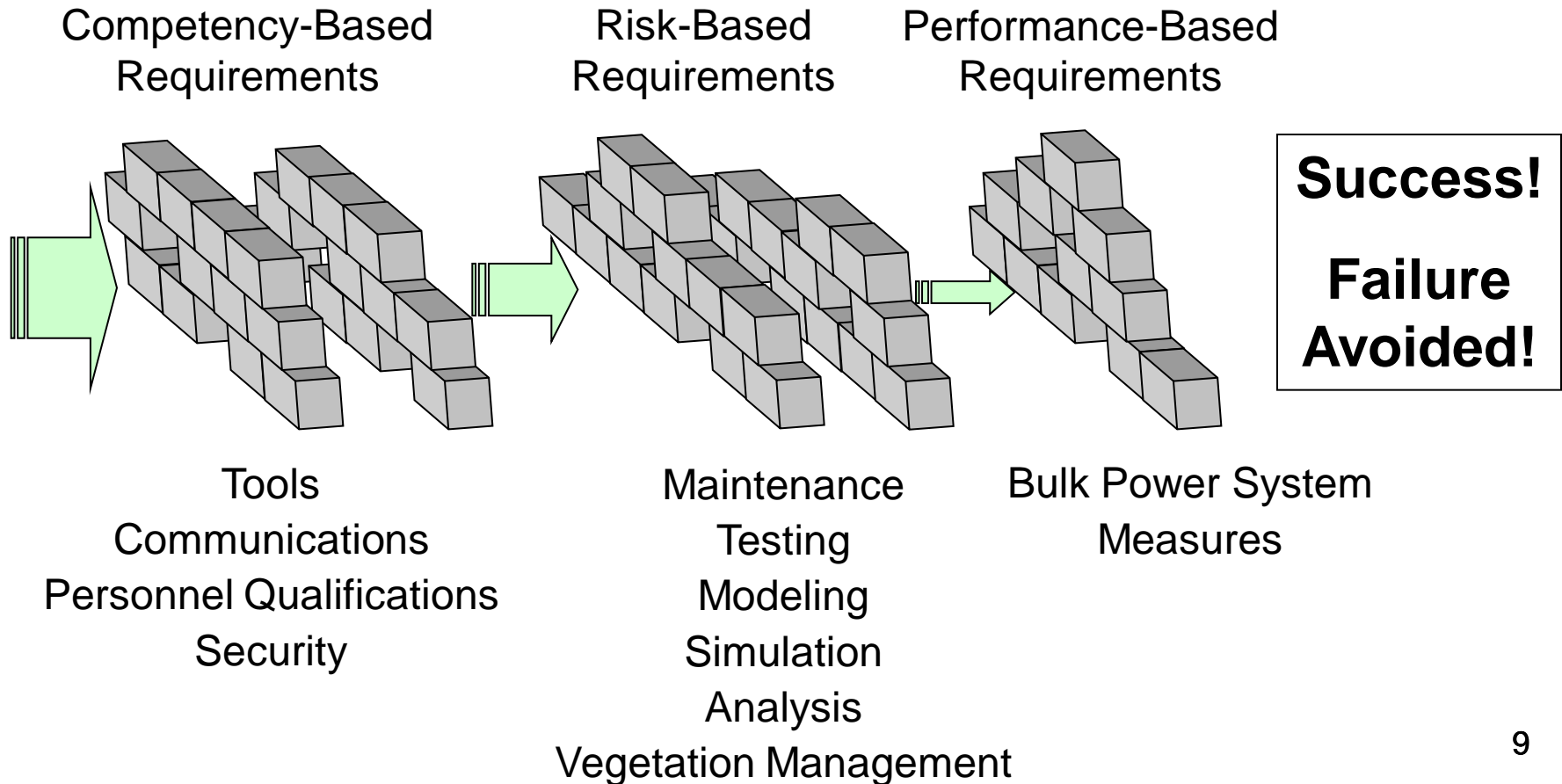
Transition to Results-based

Results-based Reliability Standards

- Process for drafting standards
- Create a portfolio of performance, risk, and competency-based requirements
- Defense-in-depth strategy
- Clear and measurable expected outcomes
- Requirements structured in the form of *who, under what conditions (if any), shall perform what action, to achieve what particular result or outcome*

Transition to Results-based

Building Barriers to Failure



- Started with Standards Committee top projects
 - 1) Project 2006-02 Assess Transmission and Future Needs
 - 2) Project 2006-06 Reliability Coordination
 - 3) Project 2007-01 Underfrequency Load Shedding
 - 4) Project 2007-02 Operating Personnel Communications Protocols Project
 - 5) Project 2007-03 Real-time Transmission Operations
 - 6) Project 2007-07 Vegetation Management
 - 7) Project 2007-09 Generator Verification
 - 8) Project 2007-12 Frequency Response
 - 9) Project 2007-17 Protection System Maintenance & Testing
 - 10) Project 2008-01 Voltage and Reactive Planning and Control
 - 11) Project 2008-06 Cyber Security - Order 706
 - 12) Project 2009-01 Disturbance and Sabotage Reporting
 - 13) Project 2009-02: Real-time Reliability Monitoring and Analysis Capabilities
 - 14) Project 2009-03 Emergency Operations
 - 15) Project 2010-10 FAC Order 729
 - 16) Project 2010-11 TPL Table 1 Order
 - 17) Project 2010-13 Relay Loadability Order

Project Prioritization

- Added two projects nearing completion:
 - 1) Project 2006-08 Transmission Loading Relief
 - 2) Project 2007-04 Certifying System Operators

Project Prioritization

Used tool developed by the Standards Committee Process Subcommittee to prioritize remaining 17 projects. For example:

Priority Number	Project Number and Name	Overall Priority Rating	Project includes standard that is needed to be revised or created to fill an identified gap in reliability (10)	Project includes standard modifications which will improve BPS reliability: (10) - Significantly (8) - Moderately (6) - Incrementally (4) - Minimally	Project includes standard needing immediate attention due to a time-constrained regulatory directive (10)	Project includes standard modifications which need to be made in coordination with another project: (10) - Immediately (8) - in 1 to 2 years (6) - in more than 2 years	Project includes standard which is: (12) - 1 year or less (6) - 1 to 2 years (3) - 2 to 3 years away from its 5 year review requirement	Project includes standard needing modification due to input of compliance audit's team experience with the standard (6)	Project includes standard modifications related to regulatory directives without a time-constraint (4)	Project includes standard modifications necessary due to approved interpretation related to this standard (2)	Other (Please provide an explanation for the rating in the column to the right and indicate appropriate rating factor below) (x)	Explanation
1	Project 2010-05 Protection Systems	52	10	10			12	6	4		10	The definition of misoperations needs clarified. Recent analysis supports this project - RFC and SPP have performed recent work on analyzing and defining misoperations.
2	Project 2007-11 Disturbance Monitoring	34	10	8			12		4			

The prioritization tool results:

- 1) Project 2010-05 Protection Systems
- 2) Project 2007-11 Disturbance Monitoring
- 3) Project 2007-06 System Protection Coordination
- 4) Project 2010-14 Balancing Authority Reliability-based Control
- 5) Project 2008-02 Undervoltage Load Shedding
- 6) Project 2010-03 Modeling Data
- 7) Project 2010-04 Demand Data
- 8) Project 2010-02 Connecting New Facilities to the Grid
- 9) Project 2008-12 Coordinate Interchange Standards
- 10) Project 2010-07 Transmission Requirements at the Generator Interface
- 11) Project 2009-04 Phasor Measurements
- 12) Project 2009-07 Reliability of Protection Systems
- 13) Project 2010-01 Support Personnel Training
- 14) Project 2012-02 Physical Protection
- 15) Project 2009-05 Resource Adequacy Assessments
- 16) Project 2012-01 Equipment Monitoring and Diagnostic Devices
- 17) Project 2010-08 Functional Model Glossary Revisions

Location of Documents

About Standards

NERC
NORTH AMERICAN ELECTRIC
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Newsroom

About NERC Standards Compliance Assessments & Trends Events Analysis Programs

About Standards

- Functional Model
- NAESB
- GO TO Team
- Standards Committee
- Standards Process
- Workshops
- Development Plan

Reliability Standards

Standards Under Development

Balloting

Regional Reliability Standards

Home Page

Resource Documents

Standards: About Standards

NERC reliability standards define the reliability requirements for planning and operating the North American bulk power system. NERC's ANSI-compliant standards development process is defined in the Reliability Standards Development Procedure and is guided by reliability and market interface principles. The Reliability Functional Model defines the functions that need to be performed to ensure the bulk electric system operates reliably, and is the foundation upon which the reliability standards are based.

Segment Criteria - Excerpt from Reliability Standards Development Procedure, Appendix B.

The Registered Ballot Body (RBB) comprises all entities that qualify and register for one of the ten industry segments as defined in the Reliability Standards Development Procedure. Members of the RBB may vote on all proposed standards. Anyone who is directly and materially affected may propose a new standard or a revision to an existing one. Anyone may submit comments on a standard under development.

For more information about the standards program please contact Herb Schrayshuen.

Location of Documents

2010 Project for Creating Reliability Standards Development Plan: 2011-2013 Related Files			
Number	Title/Summary	Date	
	2011-2013 Reliability Standards Development Plan	08.17.2010	pdf
	Links to Key Documents Embedded in 2011-2013 Plan:		
	Quality Attributes of an Excellent Reliability Standard		
	Project Summaries		
	Project Overviews		
	NERC Standards Issues Database		
	Risk-Informed Approach for Prioritizing Development of Standards		
	Regional Standards Development Project Overviews		
	Project Prioritization Tool		
	Reliability Standards Suggestions and Comments Form	05.24.2010	doc
	2010-2012 Reliability Standards Development Plan - Volume I, II, III	05.24.2010	pdf
	Announcement : Comment Period		
	Comments Received >>		

Question and Answer Session



Questions?

Thank You

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