

Exhibit A

The Draft Project Prioritization Tool, posted for public comment from January 21, 2011 to February 10, 2011

**NERC Standards Committee
Project Prioritization Worksheet**

STANDARDS COMMITTEE Reliability Standard Project Prioritization				(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
				Click Here to Sort Projects by Priority			Click Here to Insert a Row		Cells with this color are blank and need a value entered.					
Priority Number	Project Number and Name	Short Description	Overall Priority Rating	Meet a time-constrained regulatory directive due in: (100) < 12 mo. (75) < 18 mo. (50) > 18 mo.	Address regulatory directives without a time-constraint (Directive Index for Project times two, with 0 to 50 range)	Fill an identified gap in reliability 100 = severe risk of "Big Three" 75 = moderate and widespread 50 = moderate risk or scope 25 = small risk 0 = none	Improves existing reliability standards: 100 = Significantly 75 = Moderately 50 = Incrementally 25 = Minimally 0 = none	Coordinate changes with another project: 50 = Immediately 40 = in 1 to 2 years 30 = in more than 2 years 0 = none needed	Scheduled for its 5 year review in: 50 = 1 year or less 25 = 1 to 2 years 15 = 2 to 3 years 0 = over 3 years	Address compliance issues (0 to 50)	Address failed interpretation or SDT inability to develop an interpretation 50 = major gap 25 = moderate 10 = admin 0 = none	Project Percent Complete per NERC @Task Software (0 to 100)	OTHER FACTOR (Explanation for the rating must be indicated in the column to the right) (0 to 100)	Explanation
1	Project 2008-06 Cyber Security - Order 706 (1) 419	This is the second phase (Phase 2) of Project 2008-06 Cyber Security Order 706. The project requires modifications to CIP-002 thru CIP-009 not included in Phase 1 of the project to bring the standards into conformance with the ERO Rules of Procedure and to address the directives from FERC Order 706.	371	0	50	75	100	0	25	0	50	71	0	This project involves protecting BPS facilities from cyber attack and is of critical importance to the reliability of the BPS. <i>Adjust Other Factor down to 0 with completion of CIP-002-4. Risk/Importance/Improvement are fully weighted.</i>
2	Project 2007-17 Protection System Maintenance & Testing (2) 363	Transmission and Generation Protection System Maintenance and Testing, to consolidate PRC-005-1, PRC-008-0 — Underfrequency Load Shedding Equipment Maintenance Programs; PRC-011-0 — UVLS System Maintenance and Testing; and PRC-017-0 — Special Protection System Maintenance and Testing into a single maintenance and testing standard. Standards PRC-008-0, PRC-011-0, and PRC-017-0 would then be withdrawn.	363	0	8	50	100	0	25	50	50	55	25	PRC-005-1 — Transmission and Generation Protection System Maintenance and Testing is one of the most violated standards and needs modified to clearly identify maintenance and testing requirements and intervals.
3	Project 2007-06 System Protection Coordination (3) 284	Requires upgrading and expanding the existing requirements to identify criteria for determining where to install protection system devices and for requiring the installation of those devices to protect the reliability of the bulk electric system.	279	0	0	0	100	40	25	0	50	64	0	
4	Project 2006-02 Assess Transmission and Future Needs (4) 250	Requires assessments and plans to determine if the bulk power system meets specified performance requirements under varied theoretical operating conditions to meet present and future system needs.	250	0	22	0	75	50	25	0	0	78	0	
5	BES Definition (5) 250	BES Definition	250	100	0	100	0	0	25	25	0	0	0	
6	Project 2010-07 Transmission Requirements at the Generator Interface (6) 250	This project proposes changes to the requirements and the addition of new requirements to add significant clarity to Generator Owners and Generator Operators regarding their reliability standard obligations at the interface with the interconnected grid.	250	0	0	50	100	0	25	50	0	0	25	This project affects registration and certification and encompasses 4 of the top 10 most violated standards. For the industry, the GOTO report and its recommendations are at the forefront of registration/responsibility issues.
7	Project 2007-03 Real-time Transmission Operations (16) 194	Requires upgrading and expanding existing requirements that address balancing authority responsibilities to ensure a balance between load, interchange and generation within its balancing authority area in support of interconnection frequency. Requires upgrading and expanding existing requirements that address transmission operator responsibilities to ensure the real-time operating reliability of the transmission assets within the transmission operator's area.	244	0	22	0	75	50	25	0	0	72	0	

**NERC Standards Committee
Project Prioritization Worksheet**

STANDARDS COMMITTEE Reliability Standard Project Prioritization				(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
				Click Here to Sort Projects by Priority			Click Here to Insert a Row		Cells with this color are blank and need a value entered.					
Priority Number	Project Number and Name	Short Description	Overall Priority Rating	Meet a time-constrained regulatory directive due in: (100) < 12 mo. (75) < 18 mo. (50) > 18 mo.	Address regulatory directives without a time-constraint (Directive Index for Project times two, with 0 to 50 range)	Fill an identified gap in reliability 100 = severe risk of "Big Three" 75 = moderate and widespread 50 = moderate risk or scope 25 = small risk 0 = none	Improves existing reliability standards: 100 = Significantly 75 = Moderately 50 = Incrementally 25 = Minimally 0 = none	Coordinate changes with another project: 50 = Immediately 40 = in 1 to 2 years 30 = in more than 2 years 0 = none needed	Scheduled for its 5 year review in: 50 = 1 year or less 25 = 1 to 2 years 15 = 2 to 3 years 0 = over 3 years	Address compliance issues (0 to 50)	Address failed interpretation or SDT inability to develop an interpretation 50 = major gap 25 = moderate 10 = admin 0 = none	Project Percent Complete per NERC @Task Software (0 to 100)	OTHER FACTOR (Explanation for the rating must be indicated in the column to the right) (0 to 100)	Explanation
8	Project 2007-12 Frequency Response (7) 238	Requires entities to provide data needed to model each interconnection's frequency response.	240	50	5	50	100	0	25	0	0	10		This project involves improving frequency response which has been noted to be declining. This is of critical importance to the reliability of the BPS. <i>AM - Other Factor points weighted in column (f) Time Constrained Regul. Dir.</i>
9	Project 2010-05 Protection Systems (8) 237	Modify current PRC standards and definitions related to Protection System Misoperations to support a good metric for measurement of Protection System performance and ensure the reliability of the bulk power system.	237	0	2	50	100	0	25	50	0	0	10	The definition of misoperations needs clarified. Recent analysis supports this project - RFC and SPP have performed recent work on analyzing and defining misoperations.
10	Project 2010-10 FAC Order 729 (9) 213	Address directives in FERC Order 729 relative to FAC-012-1 and FAC-013-1: (1) must address the Planning Horizon to ensure continuity with the ATC-related MOD standards; (2) should not address the Operating Horizon, because the ATC-related MOD standards already address this area; (3) should not delegate oversight and responsibility for this standard to Regional Entities, but rather do so at the ERO level; (4) must not conflict with the ATC-related MOD standards; and (5) must include Violation Risk Factors ("VRF") and Violation Severity Levels ("VSL").	222	100	1	0	50	0	0	0	0	71	0	
11	Project 2006-06 Reliability Coordination (12) 205	Requires upgrading and expanding existing requirements that address reliability coordinator actions to prevent instability, uncontrolled separation or cascading outages.	217	0	12	0	50	50	25	0	0	80	0	
12	Project 2007-02 Operating Personnel Communications Protocols (10) 210	Requires developing new requirements in support of blackout recommendation #26 to ensure that real-time system operators use standard communication protocols during normal and emergency operations.	210	0	8	0	75	50	25	0	0	52	0	
13	Project 2007-11 Disturbance Monitoring (11) 207	Requires upgrading and expanding existing requirements for entities to install disturbance monitoring equipment and report disturbance data to ensure information is available to analyze bulk power system disturbances.	207	0	1	50	75	0	25	0	0	56	0	
14	Project 2010-11 TPL Table 1 Order (13) 201	Provide clarity to industry on TPL-002-0, Table 1 - footnote 'b', regarding the planned or controlled interruption of electric supply where a single contingency occurs on a transmission system.	201	100	1	0	50	50	0	0	0	0	0	
15	Project 2010-13 Relay Loadability Order (15) 196	Modify PRC-023-1 Transmission Relay Loadability standard and maybe other standards in compliance with the FERC Order 733 issued on March 18, 2010.	197	100	10	0	75	0	0	0	0	12	0	
16	Project 2007-01 Underfrequency Load Shedding (14) 196	Requires upgrading and expanding existing requirements to ensure that UFLS programs are coordinated and meet both regional and continent-wide criteria to operate when and only when needed.	196	0	0	0	75	0	25	0	0	96	0	<i>Note - this project is ready for filing - will drop off Active Prioritization list</i>

**NERC Standards Committee
Project Prioritization Worksheet**

STANDARDS COMMITTEE Reliability Standard Project Prioritization				(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
				Click Here to Sort Projects by Priority			Click Here to Insert a Row		Cells with this color are blank and need a value entered.					
Priority Number	Project Number and Name	Short Description	Overall Priority Rating	Meet a time-constrained regulatory directive due in: (100) < 12 mo. (75) < 18 mo. (50) > 18 mo.	Address regulatory directives without a time-constraint (Directive Index for Project times two, with 0 to 50 range)	Fill an identified gap in reliability 100 = severe risk of "Big Three" 75 = moderate and widespread 50 = moderate risk or scope 25 = small risk 0 = none	Improves existing reliability standards: 100 = Significantly 75 = Moderately 50 = Incrementally 25 = Minimally 0 = none	Coordinate changes with another project: 50 = Immediately 40 = in 1 to 2 years 30 = in more than 2 years 0 = none needed	Scheduled for its 5 year review in: 50 = 1 year or less 25 = 1 to 2 years 15 = 2 to 3 years 0 = over 3 years	Address compliance issues (0 to 50)	Address failed interpretation or SDT inability to develop an interpretation 50 = major gap 25 = moderate 10 = admin 0 = none	Project Percent Complete per NERC @Task Software (0 to 100)	OTHER FACTOR (Explanation for the rating must be indicated in the column to the right) (0 to 100)	Explanation
17	Project 2009-02 Real-time Reliability Monitoring and Analysis Capabilities (27) 100	The new standard or standards will establish requirements for the functionality, performance, and management of Real-time tools for Reliability Coordinators, Transmission Operators, and Balancing Authorities for use by their System Operators in support of reliable System operations.	189	0	2	75	50	0	25	0	0	37	0	This was identified as one of three high priority projects by FERC's reliability staff in 2010. <i>Consider whether to adjust Other Factors.</i>
18	Project 2007-07 Vegetation Management (18) 163	Requires upgrading the existing requirements for entities to implement a vegetation management program to prevent transmission outages that adversely impact the reliability of the bulk electric system.	188	0	11	0	50	0	25	0	0	52	50	This project is being used as the proof-of-concept for the results-based reliability standards initiative. <i>Also includes alternative approaches to VRFs and VSLs that need industry consideration.</i>
19	Project 2009-03 Emergency Operations (17) 170	This set of EOP standards may be merged into a single standard. There are some requirements in IRO-001 that may be improved and merged into the new "merged" EOP standard.	170	0	19	0	50	0	25	0	50	26	0	This was identified as one of three high priority projects by FERC's reliability staff in 2010. Add Other Factor points?
20	Project 2009-04 Phasor Measurements (19) 163	Supports a blackout recommendation. Several industry studies were issued that need to be analyzed to determine appropriate requirements for a NERC standard.	163	0	38	0	100	0	0	0	0	0	25	This project supports a Blackout Report recommendation. <i>However, it can't be started until the technical report has been developed</i>
21	Project 2010-14 Balancing Authority Reliability-based Control (21) 152	Requires upgrading existing requirements to ensure that balancing authorities take actions to maintain interconnection frequency with each balancing authority contributing its fair share of frequency control. Also requires corrective action by the BA when excessive Area Control Error may be contributing to or causing action to be taken to correct an SOL/IROL problem, to prevent Interconnection frequency excursions of short duration attributed to the ramping of on and off-peak Interchange Transactions, and to support timely transmission congestion relief by requiring corrective load/generation management by the Balancing Authority(ies) within a defined timeframe when participating in transmission loading relief procedures.	162	0	1	0	75	0	25	0	50	11	0	
22	Project 2008-12 Coordinate Interchange Standards (20) 158	Revise the set of Coordinate Interchange standards to ensure that each requirement is assigned to an owner, operator or user of the bulk power system, and not to a tool used to coordinate interchange, to address the Interchange Subcommittee's concerns related to the Dynamic Transfers and Pseudo-ties, and to address previously identified stakeholder comments and applicable directives from Order 693.	158	0	4	50	25	0	25	25	0	29	0	
23	Project 2007-09 Generator Verification (23) 117	Requires upgrading existing requirements for generators to verify their capabilities to ensure that accurate data is used in model to assess the bulk electric system.	157	0	4	0	50	40	25	0	0	38	0	This was identified as one of three high priority projects by FERC's reliability staff in 2010. <i>AM - Add Reliability Gap or Other Factor points?</i>

**NERC Standards Committee
Project Prioritization Worksheet**

STANDARDS COMMITTEE Reliability Standard Project Prioritization				(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
				Click Here to Sort Projects by Priority			Click Here to Insert a Row		Cells with this color are blank and need a value entered.					
Priority Number	Project Number and Name	Short Description	Overall Priority Rating	Meet a time-constrained regulatory directive due in: (100) < 12 mo. (75) < 18 mo. (50) > 18 mo.	Address regulatory directives without a time-constraint (Directive Index for Project times two, with 0 to 50 range)	Fill an identified gap in reliability 100 = severe risk of "Big Three" 75 = moderate and widespread 50 = moderate risk or scope 25 = small risk 0 = none	Improves existing reliability standards: 100 = Significantly 75 = Moderately 50 = Incrementally 25 = Minimally 0 = none	Coordinate changes with another project: 50 = Immediately 40 = in 1 to 2 years 30 = in more than 2 years 0 = none needed	Scheduled for its 5 year review in: 50 = 1 year or less 25 = 1 to 2 years 15 = 2 to 3 years 0 = over 3 years	Address compliance issues (0 to 50)	Address failed interpretation or SDT inability to develop an interpretation 50 = major gap 25 = moderate 10 = admin 0 = none	Project Percent Complete per NERC @Task Software (0 to 100)	OTHER FACTOR (Explanation for the rating must be indicated in the column to the right) (0 to 100)	Explanation
24	Project 2008-01 Voltage and Reactive Planning and Control (22) 134	This project supports a blackout recommendation. Industry debate is needed on whether there should be a North American standard that requires a specific amount of reserves, or whether requirements for specific reserves should continue to be addressed at the regional level. The requirements in the existing standards need to be upgraded to be more specific in defining voltage and reactive power schedules. Consideration should be given to adding a requirement for the Reliability Coordinator to monitor and take action if reactive power falls outside identified limits.	136	0	12	0	50	0	25	0	0	49	0	
25	Project 2009-01 Disturbance and Sabotage Reporting (24) 108	This project will entail revision to existing standards CIP-001 and EOP-004. The standards may be merged to eliminate redundancy and provide clarity on sabotage events. EOP-004 has some 'fill-in-the-blank' components to eliminate. The development may include other improvements to the standards deemed appropriate by the drafting team, with the consensus of stakeholders, consistent with establishing high quality, enforceable and technically sufficient bulk power system reliability standards.	110	0	8	0	25	0	25	0	0	52	0	
26	Project 2008-02 Undervoltage Load Shedding (25) 104	Consider consolidating PRC-010-0 — Assessment of the Design and Effectiveness of UVLS Program and PRC-022-1 — Under-Voltage Load Shedding Program Performance. Missing are any criteria for identifying where UVLS should be installed. The team will utilize the FIDVR (Fault-Induced Delayed Voltage Recovery) Technical Reference Paper in the development of requirements.	104	0	4	0	75	0	25	0	0	0	0	
27	Project 2009-07 Reliability of Protection Systems (26)	Requires facility owners to have protection system equipment installed such that, if there were a failure to a specified component of that protection system, the failure would not prevent meeting the BES performance identified in the TPL standards.	100	0	0	0	100	0	0	0	0	0	0	
28	Project 2010-08 Functional Model Glossary Revisions (28)	The Functional Model Working Group (FMWG) has received many comments and questions from stakeholders concerning the differences in definitions between the Functional Model and the NERC Glossary of Terms Used in Reliability Standards. This project is designed to address these comments and make the definitions of functional entities consistent between the Functional Model and the NERC Glossary of Terms Used in Reliability Standards.	85	0	0	0	25	0	0	50	0	0	10	Getting core NERC documents straight is essential to all other ERO functions, standards development, compliance (auditing, investigating and enforcement), RAPA reports,...

**NERC Standards Committee
Project Prioritization Worksheet**

STANDARDS COMMITTEE Reliability Standard Project Prioritization				(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
				Click Here to Sort Projects by Priority			Click Here to Insert a Row		Cells with this color are blank and need a value entered.					
Priority Number	Project Number and Name	Short Description	Overall Priority Rating	Meet a time-constrained regulatory directive due in: (100) < 12 mo. (75) < 18 mo. (50) > 18 mo.	Address regulatory directives without a time-constraint (Directive Index for Project times two, with 0 to 50 range)	Fill an identified gap in reliability 100 = severe risk of "Big Three" 75 = moderate and widespread 50 = moderate risk or scope 25 = small risk 0 = none	Improves existing reliability standards: 100 = Significantly 75 = Moderately 50 = Incrementally 25 = Minimally 0 = none	Coordinate changes with another project: 50 = Immediately 40 = in 1 to 2 years 30 = in more than 2 years 0 = none needed	Scheduled for its 5 year review in: 50 = 1 year or less 25 = 1 to 2 years 15 = 2 to 3 years 0 = over 3 years	Address compliance issues (0 to 50)	Address failed interpretation or SDT inability to develop an interpretation 50 = major gap 25 = moderate 10 = admin 0 = none	Project Percent Complete per NERC @Task Software (0 to 100)	OTHER FACTOR (Explanation for the rating must be indicated in the column to the right) (0 to 100)	Explanation
29	Project 2010-04 Demand Data (29)	As envisioned, this project will result in two standards — with MOD-016 through MOD-020 in a single standard, and MOD-021 in a separate standard. The requirements need to be more specific to clearly identify the format, etc., for providing data.	82	0	7	0	50	0	25	0	0	0	0	
30	Project 2010-03 Modeling Data (30)	Requires merging, upgrading and expanding existing requirements for entities to provide data used to model the bulk electric system.	75	0	0	0	50	0	25	0	0	0	0	
31	Project 2012-02 Physical Protection (31)	Consider the development of reliability standards for the physical protection of essential equipment, buildings and people located in power generation, transmission, or distribution system locations in order to mitigate the associated reliability risks to the bulk power system.	75	0	0	0	75	0	0	0	0	0	0	
32	Project 2009-05 Resource Adequacy Assessments (32)	Implements recommendations from the Resource and Transmission Adequacy Task Force (RTATF) Report and the Gas/Electricity Interdependency Task Force Report, approved by the NERC Board on June 15, 2004, related to resource adequacy.	72	0	22	0	50	0	0	0	0	0	0	
33	Project 2010-01 Support Personnel Training (33)	Require the use of a systematic approach to determining training needs of generator operators and operations planning and support staff with a direct impact on the reliable operations of the bulk power system.	51	0	1	0	50	0	0	0	0	0	0	
34	Project 2010-02 Connecting New Facilities to the Grid (34)	Ensure that all of the elements that should be addressed when a new facility is connected to the grid are included in the revised standard.	50	0	0	0	25	0	25	0	0	0	0	
35	Project 2012-01 Equipment Monitoring and Diagnostic Devices (35)	Consider the development of reliability standards for the application of major equipment monitoring and diagnostic devices and procedures.	50	0	0	0	50	0	0	0	0	0	0	

Exhibit B

The Reference Document for the Project Prioritization Tool, posted with the Draft Tool

The background of the slide features a large, semi-transparent image of a high-voltage power transmission tower on the right side. The tower is a lattice structure with multiple cross-arms. The overall color scheme is light blue and white, with a dark blue curved shape in the top right corner. A thick orange horizontal bar is positioned below the NERC logo and above the main title.

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Standards Committee Process for Standards Project Identification, Prioritization, and Monitoring

Draft for Comment

to ensure
the reliability of the
bulk power system

January 2011

116-390 Village Blvd., Princeton, NJ 08540
609.452.8060 | 609.452.9550 fax
www.nerc.com

Table of Contents

Objective	3
Background	3
1. Identifying the List of Standards Projects	3
2. Listing and Prioritizing Baseline Projects	4
3. Developing the Project Cut-off Line Based on Resource Constraints	5
4. Adding New Projects and Adjusting Project Priority.....	5
5. Developing Projects Schedules	6
6. Monitoring Projects	6
7. Project Identification, Prioritization and Management Flow Diagram	7
8. Project Prioritization Tool Description.....	7
Rows	7
Columns	7
Figure 1	10
Attachment A	11

Objective

This document presents a Standards Committee process for identifying, prioritizing, and monitoring NERC standards development projects, taking into account the various drivers for project initiation and the industry's resource constraints. The process provides the flexibility to accommodate new projects and to adjust project priority and completion schedule in response to changing conditions.

Background

Since the startup of the ERO, the number of standards development projects has grown significantly. Coupled with the increasing number of requests for interpretations and directives issued by regulatory authorities, the industry has experienced a rapid and sustained increase in standards development related workload. The standards development process allows for any individual to propose a new project or request an interpretation. While the Standards Committee can exercise its discretion to delay the start of any project to cope with increased workload and to better manage standard projects to achieve timely completion, additional flexibility beyond just withholding the start of a project is needed.

At its April 2010 meeting, the NERC Standards Committee endorsed a proposal to develop a structured process to assist in managing standards development projects from the project planning stage through submission of a completed standard to the NERC Board of Trustees. The process outlined in this document takes into account industry resource constraints and changing conditions as new projects emerge and as issues are encountered during the course of standard development.

1. Identifying the List of Standards Projects

In general, standard projects may be initiated for a variety of reasons, including:

- a. **Periodic Review** — To meet the five-year standard revision cycle requirement
- b. **Reliability Need** — Industry participants, NERC staff or the Board of Trustees identify the need for a new standard or revision to an existing standard to meet reliability need or fill a reliability gap
- c. **Clarity, Quality and Coordination**— Industry participants, NERC and Regional Entity staff identify quality and clarity gaps in NERC's existing reliability standards that need to be remedied to ensure consistent industry compliance. Regional Entities and stakeholders may propose continent-wide NERC standards that will avoid the need to develop regional standards which will be phased out when the NERC standards are put in place
- d. **Interpretations** — Industry participants submit formal requests for interpretation that may identify a gap or deficiency in an existing standard
- e. **Regulatory Directives** — FERC or Canadian regulatory authorities may direct the ERO to make changes to standards, to incorporate suggested improvements, address deficiencies in existing NERC standards, or respond to new energy policies.

DRAFT for Comment: Standards Committee Process for Standards Project Identification, Prioritization, and Monitoring

Plans for developing standards to take care of the periodic review requirement (Driver (a), above) can be developed with some degree of accuracy. However, the scope and complexity of project plans for standards initiated in response to the other four drivers are much harder to predict. It is therefore very difficult to develop a standards development work plan that accounts for all new projects to be initiated in a future year with any degree of accuracy. However, for planning purposes, a baseline list of projects can be developed for a future year based on:

- a. Current projects expected to continue into the next year
- b. New projects to address the five-year periodic review requirement expected within the next year.

As a first pass, a baseline list of standard projects can be developed and prioritized without regard to resource constraints. A cutoff line will then apply to the baseline list using the resource constraint assumptions presented in Section C, below.

2. Listing and Prioritizing Baseline Projects

Some standard projects need to be placed at a higher priority than the others due to the urgency or significance of the associated drivers for development or revision. For example, revising a standard to fill a reliability gap should normally have a higher priority than revising a standard to improve quality or clarity. Similarly, removing ambiguity (which itself may be a form of reliability gap) from a standard that has a large number of violations would normally have a higher priority than combining two or more standards to remove overlaps and consolidate similar or related requirements.

However, the rationale presented in the above two examples only represents a general principle, which cannot be applied objectively to develop a standard project priority list that balances all interests, unless a systematic approach is developed to provide a balanced weighting of each of the development drivers outlined above. The Standards Committee, in trying to prioritize projects in the Standards Development Work Plan for 2011-2013, adopted the concept of using a project prioritization tool to develop standard project priorities for the coming year. (See Appendix A)

The use of a "*prioritization tool*" is essential to ensuring all the drivers for new projects are fully considered in the allocation of NERC and industry resources between each of the projects in NERC's Reliability Standards Development Plan. With prior inputs from all concerned parties on the prioritization criteria and associated weighting of these criteria, the tool will establish a relative priority score for each project, irrespective of who and why the project is proposed. This is particularly important to avoid arbitrary or highly subjective decisions on which projects should be placed at a higher priority than the others.

Ultimately the prioritization tool described below is just that – a tool to guide informed decision making by the NERC Standards Committee and the NERC Board of Trustees on the relative priority of proposed and ongoing standards development projects.

3. Developing the Project Cut-off Line Based on Resource Constraints

The baseline project list represents a snapshot of the projects that the Standards Committee needs to manage in the current year. Recognizing that the resources needed at NERC and in the industry for standards development are not unlimited, the Standards Committee must determine which ongoing projects should be directed to continue development work to ensure timely completion, which new projects must be initiated to address NERC reliability objectives and meet regulatory deadlines, and when necessary, which standard development projects should be placed on hold until additional NERC and industry resources become available.

NERC has a finite annual budget and the industry has finite resources; together these factors limit the number of standards development projects that can be worked on concurrently. While an increase in NERC staff resources may address certain development bottlenecks, there is no clear indication or assurance that a corresponding increase in industry resources to participate in the drafting, reviewing, commenting and balloting the standards is forthcoming. The Standards Committee must consider these resource constraints when planning for the number of projects that can be effectively managed in any given time period.

There are no fixed rules or formulas with which to estimate staff and industry resource requirements or constraints for standards development. For a baseline estimate, past experience is the best source of information. Recent Standards Committee and NERC staff experience generally supports the conclusion that NERC and the industry can manage the development of no more than ten to twelve standards projects under active development at any one time. This judgment of course depends on the complexity of these projects and considerations as to whether projects draw upon the same subject matter expert (“SME”) resource pool during the same period. Nonetheless, our informed judgment is that attempts to develop more than ten or twelve projects during the same period will result in an actual loss of throughput and/or a reduction in standards quality.

4. Adding New Projects and Adjusting Project Priority

The baseline list does not factor in new projects that may emerge during a given project development year due to the other four drivers (b) through (e) in Section A. This uncertainty is particularly difficult to address with respect to regulatory directives. When new projects emerge and are evaluated, the Prioritization Tool is designed to score each new project on a stand-alone basis. The resulting point scores may indicate that some new projects should have priorities higher than other projects on the baseline list that are currently under active development. It is generally assumed that ongoing projects should have highest priority and should continue development work regardless of other projects’ emergence. Unfortunately, both emerging reliability issues and regulatory directives may lead the Standards Committee to direct that one or more projects that are currently above the cutoff line must now be put on hold until resources become available and development work can be restarted.

DRAFT for Comment: Standards Committee Process for Standards Project Identification, Prioritization, and Monitoring

The Standards Committee will decide if any of the ongoing projects should be stopped or deferred and advise the respective Standard Drafting Teams (SDTs) accordingly, or develop other remedial actions to launch the new projects and continue with all ongoing projects. If in its judgment that none of the ongoing projects should be stopped and the new projects should be launched but no resource relief can be provided, the Standards Committee will bring the situation along with options and recommendations to the Board of Trustees for its attention and direction.

5. Developing Projects Schedules

The time required to complete a standard development project varies from one project to another depending on the scope of work and the complexity of the issues to be addressed. While the SAR proponents generally have a good grasp of the time required to complete a standard project from the formation of the SDT to balloting, the SDT itself may have more intimate knowledge of the technical issues involved and hence a better feel of the time needed to complete its assigned project. Further, since SDT members are industry volunteers that are committed to their projects, it is desirable and appropriate that the SDTs provide inputs into their project schedules and milestone events.

In general, NERC staff together with the Standards Committee will develop an initial project schedule based on past experience, complexity of the standards and other considerations such as available expertise, compliance deadlines, etc. To the extent possible, the SDT should be given the opportunity to review and adjust the project schedule at its initial meetings, and present a revised schedule, where appropriate, to the Standards Committee for consideration. Once approved by the Standards Committee, the SDT will take ownership of the project and its schedule, and monitor and report project progress to the Standards Committee on an as-needed basis.

6. Monitoring Projects

The SDTs are responsible for monitoring all milestone events and completion schedules for their assigned projects. If at any time the milestone dates for a project are expected to be missed, the responsible SDT should report to the Standards Committee, and present options to put the project back on schedule or request accepting delays with supporting rationale. Where necessary, the SDT may seek the Standards Committee's endorsement or advice for other remedial actions including additional resource support, resolution of contentious issues, accepting an extension of the project schedule, or other actions deemed appropriate.

Such reporting should be made at least two months prior to a milestone date in danger of being missed, and at least four months prior to the scheduled completion date (end of re-circulation balloting) that is in danger of being missed. The Standards Committee will act upon receiving a report from the SDT of potential slippage. In its deliberation, it will assess impacts of implementing any remedial actions on the status of other ongoing or pending projects.

DRAFT for Comment: Standards Committee Process for Standards Project Identification, Prioritization, and Monitoring

From time to time, the Standards Committee may request the Chair or a representative of an SDT to report on the progress of a project even there is no indication of a potential slippage.

7. Project Identification, Prioritization and Management Flow Diagram

A flow diagram showing the process described in A to F, above, is shown in Figure 1, attached.

8. Project Prioritization Tool Description

The intent of the Prioritization Tool is to allow for a consistent relative ranking of projects based upon inputs from a variety of sources. An example of the tool is contained in Attachment A of this document. The working version of the tool is maintained by the Standards Committee Process Subcommittee. The tool is a spreadsheet containing information and parameters described as follows:

Rows

- Row 1 Contains general information and macro buttons.

The *Click Here to Sort Projects by Priority* macro button simply sorts rows 3 through 250 in descending order of column E (Overall Priority Ranking) and re-establishes the priority number listed in column B (Priority Number).

The *Click Here to Insert a Row* macro button shifts all existing data down one row to insert a blank row in row 3. Data will then need to be entered into the new row.
- Row 2 Contains the column headers.

Columns

- Column A Blank.
- Column B **Priority Number:** The relative ranking of each project as a result of the data input and summed in Column E (**Overall Priority Rating**).
- Column C **Project Number and Name**
- Column D **Short Description** (of the Project)
- Column E **Overall Priority Rating** – The result of summing the inputs in columns F through O. If column N (**Project Percent Complete**) = 100, then E = 0 so that all completed projects fall to the bottom of the priority list.
- Column F **Meet a time-constrained regulatory directive** due in:
 - Less than 12 months = 100
 - 13 to 18 months = 75
 - Greater than 18 months = 50
- Column G **Address regulatory directives without a time-constraint:**
Directive Index Sum for Project times two, range 0 to 50

DRAFT for Comment: Standards Committee Process for Standards Project Identification, Prioritization, and Monitoring

Directive Index Calculation:

Q1 - The directive relates to which of the following (choose one or more)?

- Bulk electric system instability – 10 points
- Separation/Islanding – 10 points
- cascading sequence of failures – 10 points
- Items from the Blackout Report – 9 points
- Regulator Critical – 9 points
- Other operational or planning issues – 4 points
- Administrative issues – 0 points

Q2 - What kind of improvement to BPS reliability will the directive, if addressed, provide?

- Significant – 10 points
- Moderate – 8 points
- Incremental – 6 points
- Minimal – 4 points
- None – 0 points

Take the sum of the Q1 responses, up to a maximum of 20. Add the Q2 response. Then divide by 30. The result is the Individual Directive Index.

$$IDI = (\text{MIN}(20, \text{SUM}(Q1)) + Q2)/30$$

To determine the Project Directive Index, add all the IDIs for the directives assigned to a specific project. Multiply it by two, up to a maximum of 50.

$$PDI = \text{MIN}(50, \text{SUM}(IDI_1 \dots IDI_n))$$

Column H ***Fill an identified gap in reliability:***

Severe or widespread risk to reliability = 100

Moderate and widespread = 50

Moderate risk or scope = 25

Small risk = 0

Column I ***Improves existing reliability standards:*** The project includes changes to existing reliability standards or includes new requirements that would improve the overall reliability of the Bulk Electric System.

Significantly = 100

Moderately = 75

DRAFT for Comment: Standards Committee Process for Standards Project Identification, Prioritization, and Monitoring

Incrementally = 50

Minimally = 25

None = 0

Column J ***Coordinate changes with another project:*** Each project that is working in coordination with another project is assigned the same value in the prioritization tool. Coordination is occurring or is needed with another project:

Immediately = 50

In 1 to 2 years = 40

In more than 2 years = 30

None needed = 0

Column K ***Scheduled for its 5 year review in:***

1 year or less = 50

1 to 2 years = 25

2 to 3 years = 15

Over 3 years = 0

Column L ***Address compliance issues:*** Value assigned based upon NERC audit team experience during audits. Consideration also giving to the number of registered entity complaints about the standards addressed in this project. range 0 to 50

Column M ***Address failed interpretation or SDT inability to develop and interpretation:***

Major gap = 50

Moderate gap = 40

Administrative issues = 10

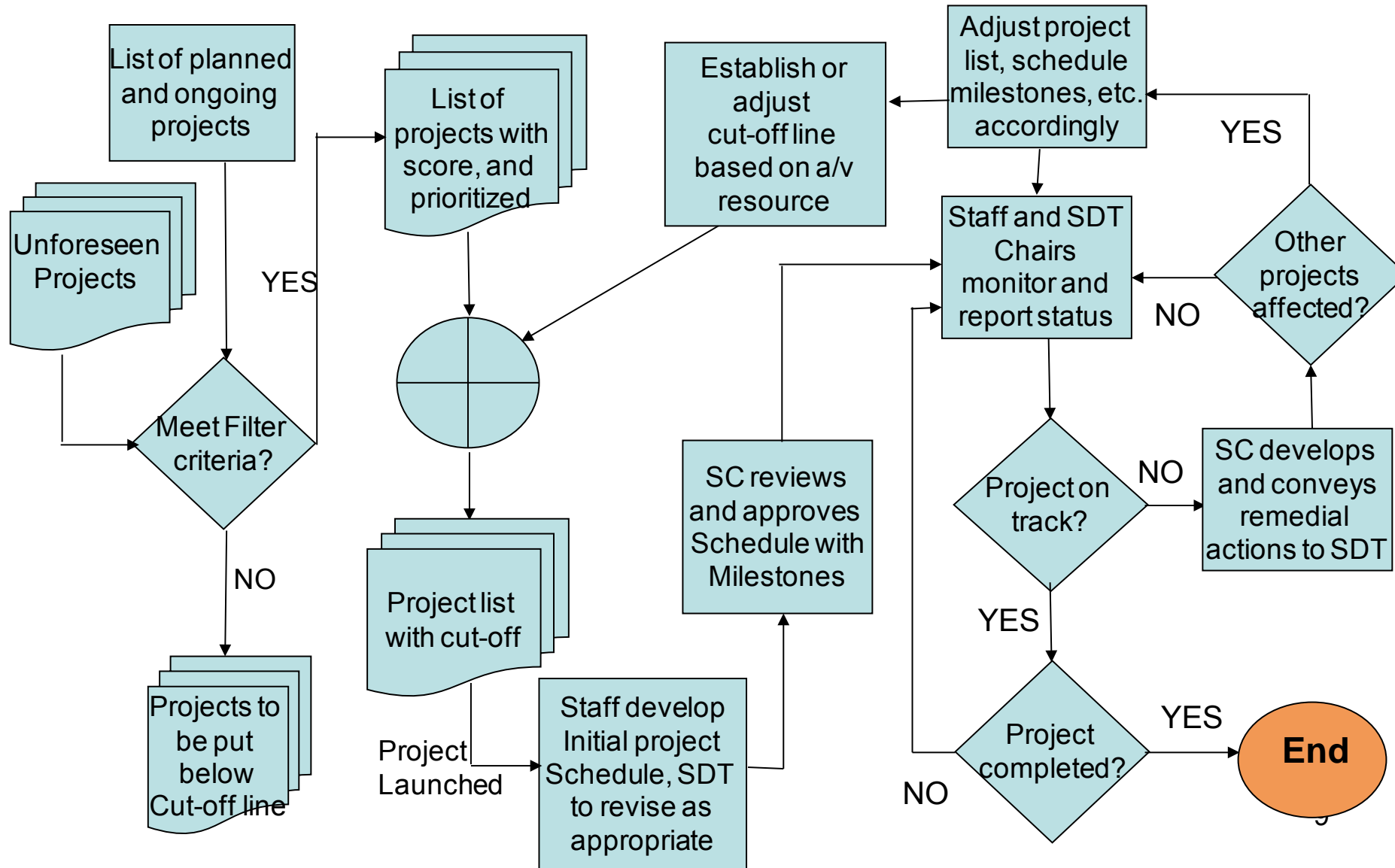
None = 0

Column N ***Project Percent Complete:*** The percentage complete of the project per the NERC @Task software ranging from 0 to 100.

Column O ***Other Factor:*** Value assigned by the Standards Committee and must be accompanied by an explanation of the relative value provided in Column P.

Column P Explanation: the explanation of the value set in column O: Other Factor.

Figure 1: Project Identification, Prioritization and Monitoring Flow Chart



Attachment A: Prioritization Tool

NERC Standards Committee
Project Prioritization Worksheet

STANDARDS COMMITTEE Reliability Standard Project Prioritization				(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
						Click Here to Sort Projects by Priority		Click Here to Insert a Row	Cells with this color are blank and need a value entered.					
Priority Number	Project Number and Name	Short Description	Overall Priority Rating	Meet a time-constrained regulatory directive due in: (100) < 12 mo. (75) < 18 mo. (50) > 18 mo.	Address regulatory directives without a time-constraint (Directive Index for Project times two, with 0 to 50 range)	Fill an identified gap in reliability 100 = severe and widespread risk to reliability 75 = moderate and widespread 50 = moderate risk or scope 25 = small risk 0 = none	Improves existing reliability standards: 100 = Significantly 75 = Moderately 50 = Incrementally 25 = Minimally 0 = none	Coordinate changes with another project: 50 = Immediately 40 = in 1 to 2 years 30 = in more than 2 years 0 = none needed	Scheduled for its 5 year review in: 50 = 1 year or less 25 = 1 to 2 years 15 = 2 to 3 years 0 = over 3 years	Address compliance issues (0 to 50)	Address failed interpretation or SDT inability to develop an interpretation 50 = major gap 25 = moderate 10 = admin 0 = none	Project Percent Complete per NERC @Task Software (0 to 100)	OTHER FACTOR (Explanation for the rating must be indicated in the column to the right) (0 to 100)	Explanation
1	Project x	Description of Project X	371	0	50	75	100	0	25	0	50	71	0	
2	Project Y	Description of Project Y	363	0	8	50	100	0	25	50	50	55	25	

Exhibit C

The announcement of the posting of the Tool

Standards Announcement Informal Comment Period Open Revised Document Posted Standards Committee Project Prioritization Tool and Reference Document January 21-February 10, 2011

Now available at: http://www.nerc.com/filez/standards/Reliability_Standards_Under_Development.html

On January 21, 2011, the Standards Committee posted a draft standard project prioritization tool and reference document (Standards Committee Process for Standard Project Identification, Prioritization, and Monitoring) proposed for use in prioritizing standard projects for an informal comment period through 8 pm on Friday, **February 10, 2011**.

A technical error was found on page 7 of the reference document. A corrected document, along with a redline showing the correction have been posted.

You are encouraged to read the reference document; review the project prioritization tool; and finally to review the proposed weightings for the projects identified in the tool. (The projects identified in the tool are the same projects that were approved in the Reliability Standards Development Plan.)

We are seeking comments on the reference document, the tool, and also the ratings assigned to the list of projects. If you disagree with the rating assigned to a specific project, please identify why you believe the rating is incorrect, and identify what rating you believe is more appropriate. Please be as specific as possible to help the Standards Committee in making adjustments to the ratings already assigned. For example, if you believe that the proposed project will fill a reliability gap that is not properly rated, identify the reliability gap that is addressed in the project. Comments will be accepted through February 10, 2011.

More Information

The project prioritization tool is an Excel spreadsheet that assigns a base weight (by summing the values in the red and orange columns) to each project based on the project's impact to reliability, and then adds more weight (by summing the values in the yellow and blue columns) to those projects that have other factors that may warrant giving that project a higher priority. The column headings (red, orange, yellow, and blue) were developed by identifying the range of factors the Standards Committee considers to determine when to start a new project.

The project prioritization tool provides the Standards Committee with the flexibility to prioritize new projects, and to adjust project priorities and completion schedules in response to changing conditions. The tool will be used to assign a priority to each standard project.

*For more information or assistance, please contact Monica Benson,
Standards Process Administrator, at monica.benson@nerc.net or at 609.452.8060.*

North American Electric Reliability Corporation
116-390 Village Blvd.
Princeton, NJ 08540
609.452.8060 | www.nerc.com

Exhibit D

Report of comments received and responses provided to commenters

Consideration of Comments on the Standards Committee - Draft Standard Prioritization Tool and Associated Reference Document.

The SC Draft Standard Prioritization Tool Drafting Team thanks all commenters who submitted comments on the draft standard prioritization tool and associated reference document. These standards were posted for a 30-day public comment period from January 21, 2011 through February 10, 2011. The stakeholders were asked to provide feedback on the standards through a special Electronic Comment Form. There were 20 sets of comments, including comments from more than 88 different people from approximately 51 companies representing 9 of the 10 Industry Segments as shown in the table on the following pages.

In this report and in the following summary, comments have been organized by question number so it is easier to see where there is consensus. Comments may be reviewed in their original format on the following web page:

<http://www.nerc.com/filez/sc.html>

Question 1: Some commenters raised the question on what criteria would be included in the "Other" column that are not already addressed by the other columns. Upon reviewing all the assessment criteria, the Standards Committee decided to limit use of the "Other" column, at least initially, to criteria not already addressed in other columns. In re-evaluating the project priorities, the Standards Committee removed all of the values in the "Other" column that were assigned for things such as "Blackout Report" since this is already addressed as a reliability improvement.

Some commenters pointed to potential duplications among specific columns. The Standards Committee agreed that there is some potential duplication between some of the columns. One of the goals of the prioritization tool was to provide greater transparency to the factors the Standards Committee considers when determining how to assign a priority to a project. Several of the columns focus on factors that the Standards Committee must address – and including these in the columns keeps these visible not only to the Standards Committee but also to stakeholders. As the Standards Committee moves forward with refining the tool, it will review and eliminate perceived duplications to the extent possible.

Some commenters suggested that the accompanying document "Process For Project Identification, Prioritization and Management" could be improved to add clarity. The document as is serves the general purpose of providing a general description of the process to identify, prioritize and manage standards projects, and a high level elaboration of the criteria in the tool. The Standards Committee will review and revise this document when the tool itself is reviewed and refined.

Some commenters disagree with the inclusion of Column F (Compliance with FERC Directives). The Standards Committee discussed the merit of including Column F at length and concluded that as a first step, this column should be included to achieve the following purposes:

- a. The overall score will illustrate the relative reliability worth of projects despite some of them having an imposed deadline, which would suggest that when resource is severely constrained and some projects must be deferred, then those projects with an imposed deadline could be considered for deferral, or placed at a lower priority, if the imposed deadline can be relaxed through some means;

- b. For two projects having similar reliability scores, the one with an imposed deadline will end up scoring higher than the one without and hence will be placed at a higher priority than the other one.

The Standards Committee understands that directives must be complied with but by removing this column, it will not give the industry, including the regulators, an overall perspective of those projects that are most critical to meet reliability needs. Also, such removal would imply that regulatory directives would “trump” reliability needs, which the Standards Committee does not believe is the intent behind the directives. As the Standards Committee gain more experience with using this tool, and upon obtaining inputs from FERC, the SC may adjust this column (and other columns) as appropriate.

Some commenters suggested that on-going projects are not given sufficient weight. The SC recognizes that there are many drivers for standard projects, and on-going work is one of them. When NERC and the industry are in a resource crunch, some projects must give way to others. At that time, the SC will have to make a hard decision balancing all the different drivers and aided by the tool’s evaluation – all projects considered, to achieve the best reliability outcome.

Some commenters made arguments that certain criteria should be assigned higher weights than others. The Standards Committee has determined that it will use the results as ‘guidance’ but not as the sole determination of what will definitively be advanced as the list of top10-12 projects. The intent in having the various columns was to provide transparency to the range of factors that the Standards Committee must consider when determining which projects should/should not be advanced. While the ratings for some criteria, for example, FERC directives, may need adjustment so they are simpler to comprehend, by keeping the columns as indicated in the worksheet, the Standards Committee is keeping its focus on its obligation to assist the ERO in addressing FERC directives while balancing the reliability needs and other drivers for advancing a project.

Question 2: Most stakeholders who provided a response indicated support for the range of questions in the tool. Clarifications were made to the Process document to indicate that regional conflict should be addressed in column L.

Question 3: Some commenters noted that the range for column g has an upper limit of 50, not 100 as implied by this question.

Several commenters provided suggestions for modifications to the range of values in the red and orange columns, however no single proposal seemed to have widespread support. The Standards Committee determined to leave the ranges as proposed during its initial use of the tool. The Standards Committee will consider whether modifications are needed as the Standards Committee gains experience in applying the tool.

Question 4: While there were suggestions for modifications to the ranges of some of the columns, the Standards Committee determined to retain the proposed ratings during the initial use of the tool. The intent of the yellow columns is to ‘add’ some ‘points’ to the base ratings assigned for the key reliability issues identified in the red and orange columns. If the ranges for the yellow columns are too small, then it is more likely that several projects will receive identical ratings, narrowing the breadth of the tool applicability. The Standards Committee will consider whether modifications are needed as the Standards Committee gains experience in applying the tool.

Question 5: Several stakeholders indicated that the “other” column was too open ended and advised against using this column to duplicate factors already considered in other columns. After much deliberation the Standards Committee has decided to use the “other” column only for factors not already considered in the other columns. When reviewing the prioritization ratings before and after this posting period, note the changes to the “other” column. Most of the values that were assigned have been removed; an example of a remaining “other” value is a rating of 50 for the

Vegetation Management project to account for its value as the prototype results based standard. Ratings assigned for inclusion in the Blackout Report have been removed.

Question 6: Additional suggestions that have merit and will be considered when revisions to the tool are considered are the following:

1. The relative level of emphasis placed upon current operational or planning issues as contrasted with previous level of emphasis, as evidenced by the number of points allowed for each, has merit and will be discussed to decide whether there is a valid reason for the values to differ.
2. FERC indicated, in the recent Reliability Prioritization Technical Conference, a willingness to explore ways to better coordinate and communicate the relative priorities of their directives; at least a partial acknowledgement that there may be differing levels of importance for various FERC directives. An interesting suggestion is to consider the adverse impacts. One aspect of adverse impacts is the possible results if there are identified reliability gaps to be addressed by the projects and those gaps are not closed. These are already addressed in one of the other columns. Another aspect suggested seems to be more related to the impacts upon the entities involved, rather than specifically related to the reliability aspects. Note that the GOTO project's ratings were revised to more accurately reflect the project's impact in closing reliability gaps, in improving existing standards, and in the need for coordination of implementation plans with other projects. It doesn't seem appropriate to assume that impacts upon specific functional entities should be considered any different than other impacts upon other functional entities.

Question 7: Based on stakeholder comments and the discussion these comments initiated, the Standards Committee has made modifications to the following projects and associated ratings:

Project 2007-17 – Protection System Maintenance and Testing

Project 2007-02 – Operating Personnel Communications Protocols

Project 2007-06 – System Protection Coordination

Project 2007-09 – Generator Verification

Project 2009-01 – Disturbance and Sabotage Reporting

Project 2010-07 – Transmission Requirements at the Generator Interface

Project 2010-14 – Balancing Authority Reliability-based Control

Project 2010-17 – Definition of BES

Project 2012-02 – Physical Protection

Question 8: The Standards Committee considers the project prioritization tool to be a 'work in progress' and has used the tool to establish a set of 10-12 projects as 'high priority' for 2011. The intent is to post the tool and its results for stakeholders to review on a periodic basis.

One stakeholder suggested that as new projects are proposed, they should be posted and rated by stakeholders. The Standards Committee believes that this would create an unnecessary administrative burden on the personnel involved; a better way to handle this would be to channel industry feedback on project priorities through the appropriate segment representatives on the Standards Committee. The Standards Committee is elected to represent stakeholders and is assigned responsibility, through its charter, to manage the progress of projects, including prioritization.

Another stakeholder noted that there were no explanations regarding the scoring values. The Standards Committee will update the associated document "*Process to Identify, Prioritize and Monitor Standard Projects*" to provide more detail to the rationale for the scoring values, and revise the tool to consider additional factors as appropriate.

April 19, 2011

If you feel that your comment has been overlooked, please let us know immediately. Our goal is to give every comment serious consideration in this process! If you feel there has been an error or omission, you can contact the Vice President and Director of Standards, Herb Schrayshuen, at 609-452-8060 or at herb.schrayshuen@nerc.net. In addition, there is a NERC Reliability Standards Appeals Process.¹

¹ The appeals process is in the Reliability Standards Development Procedures:
<http://www.nerc.com/standards/newstandardsprocess.html>.

Index to Questions, Comments, and Responses

1. Please provide any comments you have on the draft reference document.....	11
2. Project Prioritization Tool: Do you agree with the range of questions (column headings) in the tool?....	25
3. Do you agree that the range (0-100) for the red and orange columns in the tool?.....	28
4. Do you agree that the range (0-50) for four of the yellow columns, with the column identifying the investment already made in the project rated with a possible rating of 0-100?.....	33
5. Do you agree that the range (0-100) for the blue column in the tool?.....	37
6. What factors do you believe the Standards Committee should consider in the "Other" column?....	40
7. Proposed Ratings for Projects Included in the Reliability Standard Development Plan: Please review the ratings assigned to each of the individual projects. If you feel that any of the draft ratings are inaccurate, please identify the project number and the specific rating that you believe is inaccurate. Please be specific in identifying what you believe is the correct rating, and provide a justification for that proposed rating.....	44
8. Please provide any other comments you feel would be beneficial to the Standards Committee in making improvements to the reference document and project prioritization tool.....	63

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

The Industry Segments are:

- 1 — Transmission Owners
- 2 — RTOs, ISOs
- 3 — Load-serving Entities
- 4 — Transmission-dependent Utilities
- 5 — Electric Generators
- 6 — Electricity Brokers, Aggregators, and Marketers
- 7 — Large Electricity End Users
- 8 — Small Electricity End Users
- 9 — Federal, State, Provincial Regulatory or other Government Entities
- 10 — Regional Reliability Organizations, Regional Entities

Group/Individual		Commenter	Organization	Registered Ballot Body Segment									
				1	2	3	4	5	6	7	8	9	10
1.	Group	Pat Huntley	SERC SC Standards Review Group										X
Additional Member		Additional Organization	Region	Segment Selection									
1.	Charles Abell	Ameren Services Company	SERC	1, 3, 5									
2.	Neil Phinney	Georgia System Operations Corporation	SERC	3, 4									
3.	Gerald Beckerle	Ameren Services Company	SERC	1, 3, 5									
4.	Charles Long	Entergy	SERC	1, 3, 5									
5.	Jennifer Weber	Tennessee Valley Authority	SERC	1, 3, 5, 9									
6.	Jim Rowan	SERC Reliability Corp.	SERC	10									
7.	Joe Spencer	SERC Reliability Corp.	SERC	10									
8.	John Troha	SERC Reliability Corp.	SERC	10									
2.	Group	Guy Zito	Northeast Power Coordinating Council										X
Additional Member		Additional Organization	Region	Segment Selection									
1.	Alan Adamson	New York State Reliability Council, LLC	NPCC	10									
2.	Gregory Campoli	New York Independent System Operator	NPCC	2									
3.	Peter Yost	Consolidated Edison Co. of New York, Inc.	NPCC	3									

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Group/Individual	Commenter	Organization	Registered Ballot Body Segment																	
			1	2	3	4	5	6	7	8	9	10								
4.	Sylvain Clermont	Hydro-Quebec TransEnergie	NPCC	1																
5.	Bohdan M. Dackow	US Power Generating Company (USPG)	NPCC	NA																
6.	Chris de Graffenried	Consolidated Edison Co. of New York, Inc.	NPCC	1																
7.	Gerry Dunbar	Northeast Power Coordinating Council	NPCC	10																
8.	Dean Ellis	Dynegy Generation	NPCC	5																
9.	Brian Evans-Mongeon	Utility Services	NPCC	8																
10.	Mike Garton	Dominion Resources Services, Inc.	NPCC	5																
11.	Brian L. Gooder	Ontario Power Generation Incorporated	NPCC	5																
12.	Wayne Sipperly	New York Power Authority	NPCC	5																
13.	Chantel Haswell	FPL Group, Inc.	NPCC	5																
14.	Michael Schiavone	National Grid	NPCC	1																
15.	Michael R. Lombardi	Northeast Utilities	NPCC	1																
16.	Randy MacDonald	New Brunswick System Operator	NPCC	1																
17.	Bruce Metruck	New York Power Authority	NPCC	6																
18.	Lee Pedowicz	Northeast Power Coordinating Council	NPCC	10																
19.	Robert Pellegrini	The United Illuminating Company	NPCC	1																
20.	Si Truc Phan	Hydro-Quebec TransEnergie	NPCC	1																
21.	Saurabh Saksena	National Grid	NPCC	1																
3.	Group	Carol Gerou	MRO's NERC Standards Review Subcommittee																	X
	Additional Member	Additional Organization	Region	Segment Selection																
1.	Mahmood Safi	Omaha Public Utility District	MRO	1, 3, 5, 6																
2.	Chuck Lawrence	American Transmission Company	MRO	1																
3.	Tom Webb	Wisconsin Public Service Corporation	MRO	3, 4, 5, 6																
4.	Jason Marshall	Midwest ISO Inc.	MRO	2																
5.	Jodi Jenson	Western Area Power Administration	MRO	1, 6																
6.	Ken Goldsmith	Alliant Energy	MRO	4																
7.	Alice Ireland	Xcel Energy	MRO	1, 3, 5, 6																
8.	Dave Rudolph	Basin Electric Power Cooperative	MRO	1, 3, 5, 6																

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Group/Individual		Commenter	Organization	Registered Ballot Body Segment									
				1	2	3	4	5	6	7	8	9	10
9.		Eric Ruskamp	Lincoln Electric System MRO	1, 3, 5, 6									
10.		Joseph Knight	Great River Energy MRO	1, 3, 5, 6									
11.		Joe DePoorter	Madison Gas & Electric MRO	3, 4, 5, 6									
12.		Scott Nickels	Rochester Public Utilities MRO	4									
13.		Terry Harbour	MidAmerican Energy Company MRO	1, 3, 5, 6									
14.		Richard Burt	Minnkota Power Cooperative, Inc. MRO	1, 3, 5, 6									
4.	Group	Albert DiCaprio	IRC Standards Review Committee		X								
Additional Member Additional Organization Region Segment Selection													
1.	James Castle	NYISO	NPCC	2									
2.	Matt Goldberg	ISO-NE	NPCC	2									
3.	Steve Myers	ERCOT	ERCOT	2									
4.	Bill Phillips	MISO	RFC	2									
5.	Dan Rochester	IESO	NPCC	2									
6.	Mark Thompson	AESO	WECC	2									
7.	Greg Van Pelt	CAISO	WECC	2									
8.	Charles Yeung	SPP	SPP	2									
5.	Group	Lee Taylor	Industry members of the Generation Verification Standard Drafting Team		X			X					
Additional Member Additional Organization Region Segment Selection													
1.	Les Hajagos	Kestrel Power Engineering	NA - Not Applicable	NA									
2.	Gary Humphries	Duke Energy	SERC	5									
3.	David Kral	Xcel Energy	MRO	5									
4.	Brendan Kirby	Consultant to AWEA	NA - Not Applicable	NA									
5.	Gary Kruempel	MidAmerican Energy	MRO	5									
6.	Craig Quist	PacifiCorp Transmission	WECC	1									
7.	Bill Shultz	Southern Company Generation	SERC	5									
8.	Ken Stenroos	NextEra Energy	FRCC	5									
9.	Ed Wingard	AEP	RFC	5									

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Group/Individual	Commenter	Organization	Registered Ballot Body Segment											
			1	2	3	4	5	6	7	8	9	10		
10.	Hamid Zakery	Dynergy	NA - Not Applicable 5											
6.	Group	Denise Koehn	Bonneville Power Administration	X		X		X	X					
Additional Member Additional Organization Region Segment Selection														
1. Jim Domschot BPA, Transmission Field Services WECC 1														
2. Tedd Snodgrass BPA, Transmission Dispatch WECC 1														
3. Fran Halpin BPA, Power Services Duty Scheduling WECC 5														
4. James Phillips BPA, Transmission System Operations, WECC 1														
5. Don Watkins BPA, Transmission System Operations WECC 1														
6. Lorissa Jones BPA, Transmission Reliability Program WECC 1														
7. Erika Doot BPA, Power Services WECC 5														
7.	Group	Michael Gammon	Kansas City Power & Light	X		X		X	X					
Additional Member Additional Organization Region Segment Selection														
1. Jennifer Flandermeyer Kansas City Power & Light SPP				1, 3, 5, 6										
8.	Individual	David Dworzak	Edison Electric Institute	X										
9.	Individual	Janet Smith, Regulatory Compliance Supervisor	Arizona Public Service Company	X		X		X	X					
10.	Individual	Joanna Luong-Tran	TransAlta Centralia Generation, LLC					X						
11.	Individual	Joe Petaski	Manitoba Hydro	X		X		X	X					
12.	Individual	David Thorne	Pepco Holdings Inc	X		X								
13.	Individual	Andrew Pusztai	American Transmission Company	X										
14.	Individual	Laura Lee	Duke Energy	X		X		X	X					

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Group/Individual		Commenter	Organization	Registered Ballot Body Segment										
				1	2	3	4	5	6	7	8	9	10	
15.	Individual	Michael Goggin	American Wind Energy Association									X		
16.	Individual	Patrick Farrell	Southern California Edison Company	X		X		X	X					
17.	Individual	Dan Rochester	Independent Electricity System Operator		X									
18.	Individual	Jason Marshall	Midwest ISO		X									
19.	Individual	Rex A Roehl	Indeck Energy Services					X						
20.	Individual	Bob Cummings	NERC Transmission Issue Subcommittee (TIS)											

1. Please provide any comments you have on the draft reference document.

Summary Consideration:

- (1) Some commenters raised the question on what criteria would the “Other” column include that are not already addressed by the other columns. Upon reviewing all the assessment criteria, the Standards Committee decided to limit use of the “Other” column, at least initially, to criteria not already addressed in other columns. In re-evaluating the project priorities, the Standards Committee removed all of the values in the “Other” column that were assigned for things such as “Blackout Report” since this is already addressed as a reliability improvement.
- (2) Some commenters pointed to potential duplications among specific columns. The Standards Committee agreed that there is some potential duplication between some of the columns. One of the goals of the prioritization tool was to provide greater transparency to the factors the Standards Committee considers when determining how to assign a priority to a project. Several of the columns focus on factors that the Standards Committee must address – and including these in the columns keeps these visible not only to the Standards Committee but also to stakeholders. As the Standards Committee moves forward with refining the tool, it will review and eliminate perceived duplications to the extent possible.
- (3) Some commenters suggested that the accompanying document “Process For Project Identification, Prioritization and Management” could be improved to add clarity. The document as is serves the general purpose of providing a general description of the process to identify, prioritize and manage standards projects, ad a high level elaboration of the criteria in the tool. The Standards Committee will review and revise this document when the tool itself is reviewed and refined.
- (4) Some commenters disagree with the inclusion of Column F (Compliance with FERC Directives). The Standards Committee discussed the merit of including Column F at length and concluded that as a first step, this column should be included to achieve the following purposes:
 - a. The overall score will illustrate the relative reliability worth of projects despite some of them having an imposed deadline, which would suggest that when resource is severely constrained and some projects must be deferred, then those projects with an imposed deadline could be considered for deferral, or placed at a lower priority, if the imposed deadline can be relaxed through some means;
 - b. For two projects having similar reliability scores, the one with an imposed deadline will end up scoring higher than the one without and hence will be placed at a higher priority than the other one,

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

The Standards Committee understands that directives must be complied with but by removing this column, it will not give the industry, including the regulators, an overall perspective of those projects that are most critical to meet reliability needs. Also, such removal would imply that regulatory directives would “trump” reliability needs, which the Standards Committee does not believe is the intent behind the directives. As the Standards Committee gain more experience with using this tool, and upon obtaining inputs from FERC, the SC may adjust this column (and other columns) as appropriate.

(5) Some commenters suggested that on-going projects are not given sufficient weight. The SC recognizes that there are many drivers for standard projects, and on-going work is one of them. When NERC and the industry are in a resource crunch, some projects must give way to others. At that time, the SC will have to make a hard decision balancing all the different drivers and aided by the tool’s evaluation – all projects considered, to achieve the best reliability outcome.

(6) Some commenters made arguments that certain criteria should be assigned higher weights than others. The Standards Committee has determined that it will use the results as ‘guidance’ but not as the sole determination of what will definitively be advanced as the list of top10-12 projects. The intent in having the various columns was to provide transparency to the range of factors that the Standards Committee must consider when determining which projects should/should not be advanced. While the ratings for some criteria, for example, FERC directives, may need adjustment so they are simpler to comprehend, by keeping the columns as indicated in the worksheet, the Standards Committee is keeping its focus on its obligation to assist the ERO in addressing FERC directives while balancing the reliability needs and other drivers for advancing a project.

Organization	Yes or No	Question 1 Comment
SERC SC Standards Review Group		It appears that sections 5 and 6 are project management related rather than project prioritization related. It is confusing why these sections are included in this document.
<p>Response: The intent of this document was to identify how the Standards Committee plans to manage projects so that with better control over the number and timing of projects, the Standards Committee will be in a better position to assess what project work is feasible, and to step in and provide drafting teams with guidance to keep projects on schedule to the extent practical. From the Standards Committee’s perspective, identifying the top projects is just the start – helping teams manage these projects through completion is also important.</p>		

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 1 Comment
Northeast Power Coordinating Council		<p>Often times, prioritization of projects relies on experience, engineering and technical judgment. This tool and reference document provide useful and helpful guidance to the Project Prioritization activity, bringing objectivity to what can be a very subjective process. Refer also to question 8 below.</p>
<p>Response: Agree. There will always be a certain amount of subjectivity to the project prioritization process, but this tool is a step in providing all interested parties with greater visibility into the Standards Committee's processes for prioritizing and managing standard projects.</p>		
MRO's NERC Standards Review Subcommittee		<p>1. Page 2 of 12 ("Process For Project Identification, Prioritization and Management"), section A ("Identifying the list of Standard Projects"). This section indicates that projects will be initiated through various means such as "Reliability Need" and "Bridging the Gap". Is there any criteria for these initiation methods? For example, in the past the Regional Reliability Working Group (now the Regional Standards Group) has submitted their proposals as to what they believe are high priority projects but nothing came of their proposals. Another example, everyone seems to have their own idea as to what reliability means. Reliability to me means "materially impacting the operation of the Bulk Power System" to some it means "address the FERC Commission directives".</p> <p>Response: There are no established criteria for initiating projects. The Standard Processes Manual highlights various ways of proposing ideas for new projects. This includes not only submitting SARs but also submitting "Comments and Suggestions Forms" to highlight issues with existing standards and reliability issues that could be addressed through development of new standards. The input from these Comments and Suggestions forms is used when updating the Reliability Standard Development Plan each year. The proposed Reliability Standard Development Plan is publicly posted for comment each year, and the responses to all comments received are also publicly posted.</p> <p>2. Page 3 of 12 ("Process For Project Identification, Prioritization and Management"), section B ("Listing and Prioritizing Baseline Projects"). The first paragraph expresses a priority list and it ranks three topics as having the highest priority (Rank#1 - Addressing Reliability Gaps, Rank#2 - To remove ambiguity from a standard that has a large number of violations, & Rank#3 - Combining 2 or 3 standards to consolidate requirements.) Either this paragraph or the excel spread sheet should be changed since the excel spreadsheet doesn't reflect these topics as having the highest priority. The excel spreadsheet reflects the following topics as all equally having the highest priority: "time constrained directives" (column "F"), "Fill an identified gap in reliability"(column "H"), "Improve existing reliability standards"(column "I"), "project percentage complete" (column "N"), and "Other Factor" (column "O").</p> <p>Response: The examples in the reference document were meant to be examples – not meant to duplicate the exact wording of the columns in the spreadsheet. In the example cited relative to removing ambiguity from a standard with a large number of violations - - in this situation the standard would likely have a high score in several columns, resulting in an overall high score. For example if a standard were unclear and</p>

Organization	Yes or No	Question 1 Comment
		<p>this were the reason for the compliance violations you'd expect a high score in both columns I and L.</p> <p>3. Page 5 of 12 (“Process For Project Identification, Prioritization and Management”), section C (“Developing the Project Cut-off Line Based on Resource Constraints”) The paragraph starting with the text, “Despite the lack of accuracy, the above assumptions ...” The sentence “Combining the two assumptions, it follows that the number of projects that can be worked on in the coming year is the same as that of the last years.” The NSRS doesn’t follow this conclusion. If the resources are constrained and the work effort remains unchanged then why couldn’t the number of projects that could be worked on in the coming year be reduced? Reducing the active projects would allow more efficient use of existing resources both at the NERC Staff level and the industry participation level. The NSRS has heard of several drafting teams which were told to expedite their work product but then after they submitted their work product several months went by before their product was reviewed or returned back to them asking for changes. Recently, two drafting teams experienced this and tried to respond back in an expedited manner to the comments they received as a result of their work product review and as a result the full drafting teams were not aware of the responses and what was eventually posted as their work product.(i.e., 2007-17 & 2010-15)</p> <p>Response: Agree that there may be a better way of describing the conclusions from the assumptions. The Standards Committee Process Subcommittee will review and revise this part of the document as appropriate. Since the reference document was drafted, entities represented in different forums have indicated a preference to focus available resources in a more concentrated effort on a fewer number of projects.</p> <p>4. Page 8 of 12 (“Process For Project Identification, Prioritization and Management”), section H (“Project Prioritization Tool Description”), Column G (“Address regulatory directives without a time-constraint”). Not sure why an elaborate index is needed plus the factors in the index appear to be counted elsewhere in the excel spreadsheet like column “O” and column “H”. a. The 4th response to question 1 (“The directive relates to which of the following...?”) is “Items from the Blackout Report”. The items in the blackout report have also been included in the column “O” for example project 2009-04 (“Phasor Measurements”) has a “25” in column “O” since it was discussed in the blackout report.b. The sum of the first three bullets to question 1 (“The directive relates to which of the following...?”) is the same as the criterion in column “H”. This criterion in column “H” is “severe risk of “Big Three”“.</p> <p>Response: Agree that there is some duplication between some of the columns. One of the goals of the prioritization tool was to provide greater transparency to the factors the Standards Committee considers when determining how to assign a priority to a project. Several of the columns focus on factors that the Standards Committee must address – and including these in the columns keeps these visible not only to the Standards Committee but also to stakeholders. As the Standards Committee moves forward with</p>

Organization	Yes or No	Question 1 Comment
		<p>refining the tool, it will review and eliminate perceived duplications to the extent possible.</p> <p>Note that after much discussion and consideration of stakeholder suggestions for criteria deserving of extra weight in the “Other” column, the Standards Committee determined to limit use of the “Other” column, at least initially, to criteria that are not already addressed in other columns. As you review the before/after weights assigned to the various projects, note that the Standards Committee removed all of the values in the Other column that were assigned for things such as “Blackout Report” since this is already addressed as a reliability improvement. The only rating remaining in the “Other” column was assigned to the “Vegetation Management” project because this is the first ‘results-based’ project.</p> <p>5. Page 8 of 12 (“Process For Project Identification, Prioritization and Management”), section H (“Project Prioritization Tool Description”), Column G (“Address regulatory directives without a time-constraint”). The 6th response to question 1 (“The directive relates to which of the following...?”) is “Other operational or planning issues - 4 points”. Why is this response “4 points”? The NSRS sees it as comparable to the Blackout Report which has 9 points. The NSRS is thinking “other operational or planning issues” should be at least 9 or 10 points since these issues are currently or projected to be issues impacting the Bulk Power System where as the blackout report were identified issues seen in 2003. (The issues may have changed.)</p> <p>Response: Items in the blackout report have a history of contributing to serious reliability issues – the other operational or planning issues do not have the same history.</p> <p>6. Page 8 of 12 (“Process For Project Identification, Prioritization and Management”), section H (“Project Prioritization Tool Description”), Columns I, J, & K. The point spread for these columns doesn’t seem appropriate.</p> <p>a. Looking at the Columns I & H, a significant improvement in existing reliability standards is equal to filling/fixing a severe risk of the “Big Three” identified gap in reliability.</p> <p>b. Looking at the Columns I & F, a significant improvement in existing reliability standards is equal to meeting a time constrained directive.</p> <p>c. Looking at Columns J and K and comparing them to column H, the highest point spread is “50” for both Columns J & K. This spreadsheet appears to equate “standard committee processes” to “moderate risk or scope” of filling an identified reliability gap.</p> <p>Response: The version of the spreadsheet that was posted was color coded. The columns colored in red and orange collectively set a base value associated with reliability. The columns colored in yellow address a range of other factors that the Standards Committee needs to consider when determining whether to advance a project ahead of another project. There was no goal of trying to link all the columns to reliability.</p>

Organization	Yes or No	Question 1 Comment
<p>Response: Please see in-line responses.</p>		
<p>IRC Standards Review Committee</p>		<p>The IRC Standards Review Committee (SRC) would comment on one of the proposed weighting categories as being unnecessary and as being potential causes for violating the system that the process itself creates, i.e. Column f (Meet a time-constrained regulatory directive)The SRC recognizes the pragmatic rationale for including the weighting factor (NERC must comply with FERC directives). However the SRC would note that the inclusion of the factor only serves to partially adjust the subject Projects without solving the problem (to comply with a mandated FERC directive). This weighting factor in column f fails on two counts:</p> <ol style="list-style-type: none"> 1. It does not ensure the mandated directive will be given a high priority (e.g. the sample listing shows 5 FERC time-constrained directives as priorities 5, 8, 10, 14, 15. This means that the tool's priorities even with the bias will have to be ignored in order to by-pass as few as 4 and as many as 11 other Projects.) 2. It precludes the tool from being used to rate the time-constrained Projects on the same basis as the other Projects. Indeed, the inclusion of the column f weighting factor further distorts the priority order of this subset (i.e. the subset of projects composed of just the time constrained projects) relative to the other projects, because the net priority computed for those projects are not computed on the same basis as the priorities given to those other (non-constrained) projects. The SRC would suggest deleting weighting factor in column f, and replacing that factor by a simple procedure <ol style="list-style-type: none"> 1. Compute the respective Project's priority as if the Project were not mandated. and show that value (this approach gives FERC input as to the relative weighting the process would have given to the Project were the project not mandated, allowing FERC to make their decisions with information based on consensus concerns). 2. Formatting the standards can then be done in a traditional high priority to low priority; or when needed the formatting can group time-constrained projects together (showing the original priority) apart from the other projects. This suggested approach allows the tool to be used directly by FERC and NERC as the tool was meant to be used - as an unbiased prioritization without any need for "manual" adjustments; yet still see the ranking of the Projects. It would inform FERC of how its directives would be prioritized if the directives were on a common footing with other projects.
<p>Response: You are correct that the inclusion of Column f does not guarantee that a project with a government-imposed deadline will achieve a high enough score to guarantee that it will land in the 'top 10 or top 12.' There are other columns with weightings similar to that of Column f – for example Column k applies a weight to a standard based on the need for it to receive its 5-yr review. The weight that is possible in Column k isn't sufficient to ensure that every standard that will hit its 5-yr review period ends in the top 10 or 12 list. The Standards Committee has determined that it will use the results as 'guidance' but not as the sole determination of what will definitively be advanced as the list of top10-12 projects.</p>		

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 1 Comment
		<p>The Standards Committee discussed the merit of including Column F at length and concluded that as a first step, this column should be included to achieve the following purposes:</p> <ul style="list-style-type: none"> a. The overall score will illustrate the relative reliability worth of projects despite some of them having an imposed deadline, which would suggest that when resource is severely constrained and some projects must be deferred, then those projects with an imposed deadline could be considered for deferral, or placed at a lower priority, if the imposed deadline can be relaxed through some means; b. For two projects having similar reliability scores, the one with an imposed deadline will end up scoring higher than the one without and hence will be placed at a higher priority than the other one, <p>The Standards Committee understands that directives must be complied with but by removing this column, it will not give the industry, including the regulators, an overall perspective of those projects that are most critical to meet reliability needs. Also, such removal would imply that regulatory directives would “trump” reliability needs, which the Standards Committee does not believe is the intent behind the directives.</p> <p>As the Standards Committee gain more experience with using this tool, and upon obtaining inputs from FERC, the SC may adjust this column (and other columns) as appropriate.</p>
<p>Industry members of the Generation Verification Standard Drafting Team</p>		<p>The Reliability Standard Project Prioritization Process and Tool are seriously flawed in at least one critical aspect: continuity of existing efforts. While the tool does consider “Project Percent Complete” in column N this consideration is inadequate. With more projects than resources it is inherent that some projects will always be near the cutoff, either above or below. With changing priorities and new requirements it is also inevitable that the ordering of project ratings will constantly change. This will inevitably result in projects regularly moving on and off the approved list. Since most standards projects require three to five years to complete all but the very highest and very lowest priority projects will be exposed to the risk of being turned on and off, possibly multiple times. This is very disruptive to any project management and a great waste of limited and valuable industry resources. This flaw in the Reliability Standard Project Prioritization process is compounded by the fact that the majority of the project resources cannot be re-tasked to address a different project. NERC staff may be able to switch from one project to another but the industry experts that devote their time to drafting one standard can not be redirected to drafting another. Different expertise is required for each different project and a different standard drafting team is organized for each different project. “Suspending” a project is not a meaningful option. The standards development backlog is such that any suspension will be for years. Members and their companies can not commit to waiting indefinitely for the project restart. Shorter delays are already handled within the normal flow of project work. NERC rightly asks standards development team members and their employers to make a serious and significant commitment to a project when they agree to participate. NERC should make a similar commitment to see the project through so that the individuals’ work</p>

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 1 Comment
		and their companies support are not wasted.
<p>Response: Thank you for your insight into the impacts associated with slowing or deferring work on already started projects. The Standards Committee is hopeful that in the future, the modifications to the standard process (such as requiring that the technical justification for requirements be developed before a drafting team is formed, the addition of technical writers, etc) will help the industry develop projects in a shorter time period than it's been able to achieve to date. The current position is that there are too many projects under development to continue with all projects in parallel. The SC does not anticipate having this problem in the future, as the SC's revised charter and the revisions to the standard development process that were approved last year give the SC the authority to defer the initiation of new projects. The SC did not have this latitude in the past, and was forced to accept and initiate all valid proposals for new projects. The SC values the hard work of drafting teams and does not want to adversely impact any of the work already accomplished by the teams that are in place. The SC recognizes that there are many drivers for standards projects, and on-going work is one of them. When NERC and the industry are in a resource crunch, some projects must give way to others. At that time, the SC will have to make a hard decision balancing all the different drivers and aided by the tool's evaluation – all projects considered, to achieve the best reliability outcome.</p>		
Bonneville Power Administration		<p>It is essential that there be a way to include a framework to distinguish the tradeoffs between risk to reliability and cost. This tool does not address the cost factor at all and is incomplete in its ability to set priorities.</p> <p>The reference document provided both a background for the prioritization tool as well as instruction for using the tool. The background information was useful, the instructional part needs improvement. Without clear examples for each value, much ambiguity could exist when determining the values for the columns in the spreadsheet. Consistency will be the key to this tool being effectively utilized.</p> <p>On page 4 "Section C" was referred to, we could not find "Section C".</p> <p>Column H ratings in the reference document did not match what was displayed in the tool's column heading.</p> <p>We are uncertain how the values for column I address compliance issues. Once again, we think better explanation and examples would help in understanding and determining ratings for column I.</p> <p>We believe that the diagram could use some further explanation. Perhaps including swim lanes or a timing sequence would help.</p>
<p>Response: Agree that the tool does not address cost. This is a factor that is best reviewed in another arena. In a future version of the tool, the SC may add consideration of potential costs and benefits associated with adopting the standard, as well as the estimated complexity/time to complete the project.</p> <p>The Standards Committee agrees that the reference document does not provide strict guidance on criteria for the various ratings, but this detail is expected to be developed as the reference document and tool are used.</p> <p>The document was re-formatted before it was posted, and the reference to Section C should have been updated.</p> <p>The example on the last page of the reference document was modified just before posting, and the column headings of the tool were not updated at the same</p>		

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 1 Comment
		<p>time. This will be corrected. Several suggestions were made by stakeholders to modify some of the column headings, so additional changes will be made.</p> <p>Column I's values were adjusted to use published compliance reports and frequent stakeholder/registered entity complaints about ambiguity or disagreements about the meaning of a requirement between the registered entity and the CEA as a factor to be scored.</p> <p>Note the revisions made to some of the values in this column following the public posting. For example the compliance report that identifies the most frequently violated standards indicated that CIP-001 is one of the most highly violated standards. The Standards Committee adjusted this from a "0" to a "50."</p> <p>Most stakeholders seemed to understand the diagram without additional explanation. The SC hadn't considered adding timing elements to the diagram but will explore this possibility. Some of the steps take place quickly, while others take place over multiple months.</p>
<p>Kansas City Power & Light</p>		<p>The Standards Committee is to be commended regarding this effort to focus attention on the appropriate reliability areas for standards considerations. The process has been thought through well and well written. Although well done, the following recommendations are submitted for the Standards Committee consideration.</p> <ol style="list-style-type: none"> 1. Recommend the process consider balloting results as a factor in the process. Standards proposals that achieve low ballot results are an indication that a standard is in need of serious additional work. <p>Response: The Standards Committee is monitoring the implementation of the new Standard Processes Manual and the parallel comment and ballot periods. While initial ballots sometimes do achieve results lower than experiences under the old process, the new process is attracting more participants earlier in the process and more people are submitting technical comments earlier in the process.</p> <ol style="list-style-type: none"> 2. Recommend elimination of the project completion as a factor in the process. Projects that are completed should be removed from the list and, all else being equal, as a project nears completion, the project priority will gravitate to the bottom of the priority bucket. It would be better to replace this with a factor considering whether a project is on schedule or not. The farther off schedule, the priority should rise for consideration of additional resources. <p>Response: The percent complete is a factor that may not be needed in the future. Under the old standard development process, the Standards Committee was forced to accept all valid proposals for standard projects – and this resulted in far too many projects being started while others were still under development. Under the new standards process, the Standards Committee can delay the start of a new project. Now, however, the Standards Committee is faced with a situation where there are many projects that are pretty far along in their development, and the Standards Committee needs to weigh the value associated with completing that project against the value that could be obtained from completing another project. The investment made from drafting teams must be considered – the Standards Committee does not want to discourage the volunteers who have worked hard to develop standards and are near completion by directing these teams to stop work unless this is absolutely necessary. Knowing how much a team has invested in a project is a factor the Standards</p>

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 1 Comment
		<p>Committee believes is a valuable consideration in determining whether to let that project continue.</p> <p>3. Projects that are “tied together” need to be rise to the level of the highest priority of the group. Recommend the SC consider how to indicate projects that are tied together and remove this as a factor in prioritizing projects. Projects should be ranked according to their need and importance. If a high priority project is dependent on a lower priority project, then the lower priority project needs to rise to the same priority level as the high priority project to ensure the dependency does not block progress. There is a word missing in the sentence at the top of page 7. Missing word is capitalized here for emphasis and identification for the SC consideration. The sentence may need to read: From time to time, the Standards Committee may request the Chair or a representative of an SDT to report on the progress of a project even if there is no indication of a potential slippage.</p> <p>Response: The concept of further defining ‘what ties projects together’ was debated and the Standards Committee decided to only link together projects that have implementation schedules dependent upon one another. As you review the ratings of projects before and after this posting, note that the values in the column for coordination were modified in several instances to ensure that this column was only used in those few instances (such as Generator Verification where there is a standard in this project that is holding up implementation of the UFLS standard).</p>
<p>Response: Please see in-line responses.</p>		
Arizona Public Service Company		Excellent
<p>Response: Thank you for your support.</p>		
TransAlta Centralia Generation, LLC		TransAlta supports the concept of a prioritization tool and supports a logical and purposeful ranking system
<p>Response: Thank you for your support.</p>		
Manitoba Hydro		<p>Manitoba Hydro is in favour of a project prioritization tool, but has the following concerns with the reference document:</p> <p>-There should be a minimum score that a project must meet in order to be considered. Even if a project falls within the ‘cutoff’ of 10 to 12 active standards, industry resources should not be allocated to a standard that doesn’t meet a minimum score.</p>

Organization	Yes or No	Question 1 Comment
		<p>Response: While this may be necessary at some time in the future, there are currently so many projects that need to be accomplished that establishing a minimum score is not necessary.</p> <p>- The implementation of this ranking tool is not adequately addressed in the document. What happens when FERC directs revisions to a standard within a certain time frame and that project ranks lower than top 12? This situation is not addressed in the document and can be seen in the ranking of current projects.</p> <p>Response: This is a tool for use in establishing priorities based primarily on reliability. Adoption of this tool does not remove the ERO’s obligation to meet all FERC directives, nor does it remove the Standards Committee’s obligation to support the ERO in achieving those directives.</p> <p>- There is no discussion about how NERC will handle the projects that are not planned at the beginning of the year and appear from nowhere during the year. If these new projects rank higher than on-going projects, what happens then? Do they displace an existing project? There is no apparent process to deal with this situation.</p> <p>Response: Use of the prioritization tool is expected to be ongoing – when a new proposal is submitted to the Standards Committee, the Standards Committee is expected to assess the value of that proposal against the criteria in the tool and use the results to help determine when to start that project. Under the Standard Processes Manual the Standards Committee has the authority to defer the initiation of new projects.</p> <p>- NERC must stand firm on the number of projects that the industry and NERC staff can reasonably handle at any given time. On-going projects should be completed prior to the start of a new project to reduce the risk of scope creep.</p> <p>Response: Agree that the Standards Committee must be firm in controlling the number of projects that are started. It probably won’t be possible to always end one project before starting another – the SC expects a bit of overlap.</p> <p>-We agree with the statement that a large number of active standards results in reduced standard quality and a large resource draw from industry. With this in mind we suggest a maximum of 10 or less active projects at any one time based on the complexity of the active projects.</p> <p>Response: The number of projects that can be managed at once is impacted, to a large part, by the number of standards involved in each project. There is a goal of managing about 10-12 projects at a time.</p> <p>-Scoring is very subjective, particularly in columns H and I (“Fill an identified gap in reliability” and “Improves existing reliability standards”). Additional quantifiers are required to more precisely identify what is meant by ‘moderate and widespread’ for example. While it is not possible to have a completely objective ranking system, additional time should be spent on developing tangible weightings that stakeholders can ‘see’. For</p>

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 1 Comment
		<p>example, in Column L what type or number of violations and complaints would constitute a score of 25 versus a score of 50?</p> <p>Response: Agree that the SC needs to work towards less subjectivity in the scoring, and this is a goal it hopes to achieve over time.</p> <p>-Any wording relating to "Project Identification" from the Reference Document and Tool should be removed since it does not deal with any project identification issues.</p> <p>Response: Agree – there is no content in the reference document that addresses “Project Identification” – the wording has been removed from the revised document.</p> <p>-There should be an opportunity for industry to comment and vote to approve the prioritized list. –</p> <p>Response: The list of projects included in the Reliability Standard Development Plan is publicly posted for stakeholder input, review, and comment each year. The Standards Committee then approves this plan and then the Board of Trustees approves the plan and it is filed with regulatory authorities. Any project initiated beyond those in the RSDP will be posted for stakeholder comment to see if stakeholders support the need for the project and the scope of the project. Managing progress is a duty assigned to the Standards Committee and is not subject to stakeholder ballot.</p> <p>On Page 4, Paragraph 2, a Section C is referenced. Should be changed to Section 3.</p> <p>Response. Agree –this typographical error has been corrected.</p> <p>-Error on Page 7 Column E. Should be changed to ‘if Column N = 100, then Column E = 0.’ This has now been fixed by the Drafting Team.</p> <p>Response: Agree – this was corrected.</p>
<p>Response: Please see in-line responses.</p>		
American Transmission Company		None at this time.
Duke Energy		<p>Explanation on why the different columns are assigned a particular weight would be helpful, both in supporting the transparency of the prioritization effort and for future users of the tool (both Standards Committee members and NERC staff) that may not have been involved in the background discussions during the development of the tool. For example, it was not clear to some that a higher number of points would be awarded to a standard scheduled for its five year review within a year or less because completion of that</p>

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 1 Comment
		<p>project would fulfill the scheduled review. It also appears there is duplication in column I (improves existing reliability standard) and the points in column G from the directive index (Q2 - what kind of improvement to BPS reliability will the directive provide?) - an explanation in the reference document for this duplication, or how this is not duplication, would be helpful. It also appears there could be duplication in the way columns L (address compliance issues) and I (improves existing reliability standards) are used, so an explanation of the differences and how to avoid duplication there would also be useful. Perhaps an explanation in column P for any of the more subjective columns would enhance understanding.</p>
<p>Response: Agree that there is some duplication between some of the columns. One of the goals of the prioritization tool was to provide greater transparency to the factors the Standards Committee considers when determining how to assign a priority to a project. Several of the columns focus on factors that the Standards Committee must address – and including these in the columns keeps these visible not only to the Standards Committee but also to stakeholders. As the Standards Committee move forward with refining the tool, the SC will review and eliminate perceived duplications to the extent possible.</p> <p>The version of the spreadsheet that was posted was color coded. The columns colored in red and orange collectively set a base value associated with reliability. The columns colored in yellow address a range of other factors that the Standards Committee needs to consider when determining whether to advance a project ahead of another project. There was no goal of trying to link all the columns to reliability and no goal to eliminate duplication.</p>		
<p>American Wind Energy Association</p>		<p>I would echo the concerns expressed in drafts circulated by the GVS DT that the draft tool does not adequately account for the importance of maintaining the continuity of standards drafting efforts that are currently underway. As the GVS DT explained, the tool as currently drafted could lead to abrupt fluctuations in the prioritization of different standards development processes that could lead to stops-and-starts in those efforts, which would seriously undermine their efficiency.</p>
<p>Response: Agree. The Standards Committee is struggling with this issue – how to move from where we are, with too many projects already underway, to where we need to be – with a finite (smaller) number of projects under development. The intent of the “% complete” column was to highlight those projects where drafting teams have already made a significant investment in completing their projects.</p> <p>The percent complete is a factor that may not be needed in the future. Under the old standard development process, the Standards Committee was forced to accept all valid proposals for standard projects – and this resulted in far too many projects being started while others were still under development. Under the new standards process, the Standards Committee can delay the start of a new project. Now, however, the Standards Committee is faced with a situation where there are many projects that are pretty far along in their development, and the Standards Committee needs to weigh the value associated with completing that project against the value that could be obtained from completing another project. The investment made from drafting teams is being given serious consideration – the Standards Committee does not want to discourage the volunteers who have worked hard to develop standards and are near completion by directing these teams to stop work unless this is absolutely necessary. Knowing how much a team has invested in a project is a factor the Standards Committee believes is a valuable consideration in determining whether to let that project continue.</p> <p>The Standards Committee recognizes that there are many drivers for standards projects, and on-going work is one of them. When NERC and the industry are in a</p>		

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 1 Comment
<p>resource crunch, some projects must give way to others. At that time, the SC will have to make a hard decision balancing all the different drivers and aided by the tool's evaluation – all projects considered, to achieve the best reliability outcome.</p>		
<p>Independent Electricity System Operator</p>		<p>Page 7, paragraph 7 refers to “A” and “F” in the flow diagram. These should be changed to “1” and “6” respectively.</p> <p>The description of how the IDI is calculated under “Column G” should include a statement on rounding to the nearest integer.</p> <p>In the formula for IDI, “MIN(...)” is inconsistent with the text in the preceding paragraph.</p> <p>The formula for calculating PDI is missing “2 x” before “SUM(...)”.</p> <p>On the Data Values tab in the spreadsheet, the list of values under “timedirective” (Column C) should include zero, since it is currently not possible to reset any entry made in column F to zero once a selection has been made.</p>
<p>Response: Agree. These changes will be made in the revised document.</p>		
<p>Indeck Energy Services</p>		<p>The scales of the various columns are somewhat appropriately differentiated. However, columns H and I should be combined. If there's a significant gap, then the improvement will be significant. Hand I are double counting when there is a gap. Everyone likes to think their project will make a significant impact on reliability. However, there don't appear to be any significant gaps that cause the system to fail, so the likelihood that any project can make a significant impact is minimal. Only new standards filling gaps should be able to qualify over 25 points and not all of them should get much more than 25. Projects to improve, combine, clarify or update standards should average 10-15 points with a few generating 25. Column K presumes that all standards can be reviewed on a 5 year basis. With most of them approved in 2007, next year will be a crunch. Perhaps a standard review needs to be a different process than a new or revised standard.</p>
<p>Response: Some projects involve standards that already exist, while other projects involve the development of new projects – so the two columns, in many instances, do assess different aspects of reliability improvement.</p> <p>The five year review is an ANSI accreditation requirement and requires that stakeholders review the standard within 5 years of the standard's effective date – and either reaffirm (vote that the standard is okay as is) revise, or retire the standard.</p>		

2. Project Prioritization Tool: Do you agree with the range of questions (column headings) in the tool?

Summary Consideration: Most stakeholders who provided a response to this question indicated support for the range of questions in the tool. Clarifications were made to the Process document to indicate that regional conflict should be addressed in column L.

Organization	Yes or No	Question 2 Comment
Indeck Energy Services	No	Columns H&I need to be combined as stated in Question 1. Column K may be less important if a separate review process not involving an SDT is established. One missing factor is regional conflict. Project 2010-07 is an example. Only WECC is registering GO/GOP as TO/TOP. This should be a 100 point category because it distorts the standards system and isn't easily dealt with by individual Registered Entities.
<p>Response: Most stakeholders agreed with the columns and the proposal to combine columns H and I was not adopted at this time. The Standards Committee will reconsider this suggestion when looking at future revision to the tool. Regarding regional conflict, the SC would expect this to be addressed in column L. The SC has modified the Process document to be more clear in this regard.</p>		
SERC SC Standards Review Group	Yes	These seem to cover the main drivers. However, additional columns are recommended in our comments in response to questions 3 and 8 below.
<p>Response: Please see the response to comments for questions 3 and 8.</p>		
MRO's NERC Standards Review Subcommittee	Yes	The current range of questions is an acceptable start, and ATC believes that with implementation of this new tool, improvement recommendations will be identified.
<p>Response: Agree. The Standards Committee approved use of the tool with the expectation that it would be improved with experience.</p>		
Bonneville Power Administration	Yes	The range of questions seem appropriate, though better explanation and examples in the instructions would help determine consistent ratings.
<p>Response: Agree. The Standards Committee approved use of the reference document with the expectation that it would be improved with experience.</p>		
American Transmission Company	Yes	The current range of questions is an acceptable start, and ATC believes that with implementation of this new tool, improvement recommendations will be identified.

Organization	Yes or No	Question 2 Comment
<p>Response: Agree. The Standards Committee approved use of the tool with the expectation that it would be improved with experience.</p>		
<p>Independent Electricity System Operator</p>	<p>Yes</p>	<p>We understand the motivation to assess the relative importance of each Directive associated with a standards project as an input to determining the project’s ranking but we are not convinced that the detailed approach proposed is appropriate. This assessment by its very nature is subjective, so we do not see the need to first award points based on a review of the criteria listed in Q1 and Q2 and then input these scores into a formula. We suggest that points be awarded directly based on the assessment without the calculation step. Further, we propose combining the two columns and using the following simplified list of criteria. We also suggest a scoring system, with the point difference between the top two criteria being large enough “to make a difference” in the rankings (e.g. greater than or equal to the interval used in the first orange column): e.g.40 - Regulatory directive with time constraint ≤ 18 months20 - Regulatory directive with time constraint > 18 months10 - Regulatory directive with no time constraint00 - No regulatory directive</p> <p>We believe a project’s “reliability merit” rather than the existence of regulatory directives should be the factor that most significantly influences its ranking, hence our suggestion to diminish the weighting of this consideration. In reality, the issuance of a directive by regulators ought to be based on their perception of the significance of the reliability issues the directive is intended to address. To the extent that this is the case, the reliability merit of the project, if properly evaluated by the tool, would indeed carry the day and establish the appropriate ranking of the projects. In fact, the bulleted items under Q1 should be considered in assessing the reliability merit of the project in Column H.</p> <p>Further, we would like the Standards Committee to consider eliminating the column “Improves Existing Reliability Standards” since the significance of the improvements is in essence, a duplication of the criteria (column) “Fill an Identified Gap in Reliability”. We believe there is a clear correlation between the “size” of a reliability gap and the risk it presents, and the impact/improvement of actions taken to close the gap. There is therefore no need for duplication. If increased granularity is required, the SC could consider adding another one or two tiers under “Fill an Identified Gap in Reliability” with adjustments to the intervals between tiers.</p> <p>Additionally, the weighting of Column H relative to the other columns should be increases to place greater emphasis on the reliability considerations in the ranking. The top tier could probably be say 150 points.</p> <p>While we agree with the other column headings we do not agree with the weightings (maximum scores); this could be addressed by simply adjusting the maximum score in Column H and/or as suggested below.</p>
<p>Response: The Standards Committee has determined that it will use the results as ‘guidance’ but not as the sole determination of what will definitively be advanced as the list of top10-12 projects. The intent in having the various columns was to provide transparency to the range of factors that the Standards Committee must consider when determining which projects should/should not be advanced. While the ratings for directives may need adjustment so they are simpler to comprehend, by keeping this column in the worksheet, the Standards Committee is keeping its focus on its obligation to assist the ERO in addressing</p>		

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 2 Comment
<p>these directives.</p> <p>The two columns that focus on filling a reliability gap and improving a standard don't necessarily assess the same things. The "gap" column indicates that NERC has no standards to address a certain reliability risk. The "improving" column is intended to indicate there is no gap, but there are reasons to improve the standards (e.g., overall quality can be improved, the standard can be clarified or simplified, additional requirements can be added or redundant requirements can be deleted, the industry may choose to raise the minimum level of performance required, etc...).</p>		
Northeast Power Coordinating Council	Yes	
Kansas City Power & Light	Yes	
Edison Electric Institute	Yes	
Arizona Public Service Company	Yes	
TransAlta Centralia Generation, LLC	Yes	
Manitoba Hydro	Yes	
Pepco Holdings Inc	Yes	
Duke Energy	Yes	
Southern California Edison Company	Yes	

3. Do you agree that the range (0-100) for the red and orange columns in the tool?

Summary Consideration: Some commenters noted that the range for column g has an upper limit of 50, not 100 as implied by this question. The question should have asked, “Do you agree with the ranges for the red and orange columns in the tool?”

Several commenters provided suggestions for modifications to the range of values in the red and orange columns, however no single proposal seemed to have widespread support. The Standards Committee determined to leave the ranges as proposed during its initial use of the tool. The Standards Committee will consider whether modifications are needed as the Standards Committee gains experience in applying the tool.

Organization	Yes or No	Question 3 Comment
Northeast Power Coordinating Council	No	The range in Red Column “g” is 0 to 50. Otherwise agree.
Response: Agree. The question could have been better phrased.		
MRO's NERC Standards Review Subcommittee	No	<p>A. Each score should be the product of importance and urgency factors and the weighting of each score should be appropriate between these columns. Below are my specific issues:</p> <p>1. Page 3 of 12 (“Process For Project Identification, Prioritization and Management”), section B (“Listing and Prioritizing Baseline Projects”). The first paragraph expresses a priority list and it ranks three topics as having the highest priority (Rank#1 - Addressing Reliability Gaps, Rank#2 - To remove ambiguity from a standard that has a large number of violations, & Rank#3 - Combining 2 or 3 standards to consolidate requirements.) Either this paragraph or the excel spread sheet should be changed since the excel spreadsheet doesn't reflect these topics as having the highest priority. The excel spreadsheet reflects the following topics as all equally having the highest priority: “time constrained directives” (column “F”), “Fill an identified gap in reliability”(column “H”), “Improve existing reliability standards”(column “I”), “project percentage complete” (column “N”), and “Other Factor” (column “O”).</p> <p>Response: The examples in the reference document were meant to be examples – not meant to duplicate the exact wording of the columns in the spreadsheet. In the example cited relative to removing ambiguity from a standard with a large number of violations - - in this situation the standard would likely have a high score in several columns, resulting in an overall high score. For example if a standard were unclear and this were the reason for the compliance violations you'd expect a high score in both columns I and L.</p>

Organization	Yes or No	Question 3 Comment
		<p>2. Page 8 of 12 (“Process For Project Identification, Prioritization and Management”), section H (“Project Prioritization Tool Description”), Column G (“Address regulatory directives without a time-constraint”). The 6th response to question 1 (“The directive relates to which of the following...?”) is “Other operational or planning issues - 4 points”. Why is this response “4 points”? The NSRS sees it as comparable to the Blackout Report which has 9 points. The NSRS is thinking “other operational or planning issues” should be at least 9 or 10 points since these issues are currently or projected to be issues impacting the Bulk Power System where as the blackout report were identified issues seen in 2003. (The issues may have changed.)</p> <p>Response: Items in the blackout report have a history of contributing to serious reliability issues – the other operational or planning issues do not have the same history.</p> <p>3. Page 8 of 12 (“Process For Project Identification, Prioritization and Management”), section H (“Project Prioritization Tool Description”), Columns I, J, & K. The point spread for these columns doesn’t seem appropriate.</p> <p>a. Looking at the Columns I & H, a significant improvement in existing reliability standards is equal to filling/fixing a severe risk of the “Big Three” identified gap in reliability.</p> <p>b. Looking at the Columns I & F, a significant improvement in existing reliability standards is equal to meeting a time constrained directive.</p> <p>c. Looking at Columns J and K and comparing them to column H, the highest point spread is “50” for both Columns J & K. This spreadsheet appears to equate “standard committee processes” to “moderate risk or scope” of filling an identified reliability gap.</p> <p>B. I understand the need to finish a project within the time constrain given by a directive but I'm concerned with the approach that columns "F" and "G" taking. The NSRS will remind everyone that the FERC order 693 has several directives that remain unresolved such as fill-in-the-blank standards where the commission only asked for existing regional procedures to be submitted to them so that they could rule on the fill-in-the-blank standards. Up until recently, the commission has asked for very few time constrained directives. The NSRS can't help but wondering if their recent insertion of a time constrain has anything to do with the way the old open directives have not been addressed. Some of these directives while not having a time constrain are still important. (i.e., misoperations of protection systems, special protection systems, etc.) The NSRS just cautions the application of "50" to a non-time constrained directive.</p> <p>Response: The version of the spreadsheet that was posted was color coded. The columns colored in red and orange collectively set a base value associated with reliability. The columns colored in yellow address a range of other factors that the Standards Committee needs to consider when determining whether to advance a project ahead of another project. There was no goal of trying to link all the columns to</p>

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 3 Comment
		reliability.
Response: Please see in-line responses.		
Arizona Public Service Company	No	Column I (Improves existing reliability standard): should only be given a weight of 50 to be distributed as follows: Significantly 50, Moderately 25, Minimally 0. The proposed rating assigns a value of 25 for minimal improvement in the standards which does not appear reasonable.
Response: The rating of 0 has been used consistently for “none” – thus using a rating of “0” for a minimal contribution would be inconsistent with the other rating ranges in the other columns.		
American Transmission Company	No	Each score should be the product of importance and urgency factors and the weighting of each score should be appropriate between these columns.
Response: Each of the Red and Orange columns is designed to incorporate both importance and urgency. The one column (g) that does not weight the same as the other 3 (f, h, and i) is designed as such to reflect that non-time constrained directives have a less relative weight than the other three columns in the overall ranking. The columns were not all intended to assess reliability impact – some of the columns were intended to highlight other factors that the Standards Committee must consider when determining which standards to advance. If the only factor to consider were reliability impact the tool would not be needed.		
Duke Energy	No	Commenters at Duke Energy agree with the range for columns F and H (meet a time constrained regulatory directive and fill an identified gap in reliability) but believe columns should be more nuanced. There should be some consideration for the importance of a standard in addition to how much it will be improved. There are some standards that are less crucial to reliability than others, so even if the improvement to that standard is significant, it should not receive 100 points because the overall improvement to reliability would not be significant.
Response: The tool is a ‘work in progress’ and is expected to evolve as the Standards Committee gains experience. For now, reliability improvements are a more critical focus than ‘importance’. In the future, when there are less projects already under development, adding additional criteria for assessment of importance may be appropriate.		
Independent Electricity System Operator	No	See our comments above.
Indeck Energy Services	No	F is OK for 100. G is OK for 50 as on the worksheet. H and I need to be combined and then only 100 for the

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 3 Comment
		combination with only gaps being suitable for more than 25 points.
Response: Column H and I do assess different things so the SC has decided to not adopt the suggestion to merge these.		
Manitoba Hydro	No	Column H should be weighted more heavily since the primary goal of the standards is to address system reliability. A rating of 0 - 200 would be more suitable.
Response: While reliability is the primary focus, the Standards Committee is responsible for considering other factors too – including addressing directives and improving the overall quality of the standards.		
Industry members of the Generation Verification Standard Drafting Team		Red column (g) has a range of 0-50.
Response: Agree. This question could have been phrased more clearly.		
Bonneville Power Administration	Yes	Do we agree that the rating range should be (0-100), or do we agree that the rating range is appropriately assigned. We agree that a range of (0-100) is appropriate. It is difficult to answer the question given the different ways it could be interpreted.
Response: Thank you for your response. The SC did mean to ask if you believe the range of 0-100 is appropriate.		
SERC SC Standards Review Group	Yes	Please define "Big Three" in column h. Rename column "I" to "Improves Reliability" and add another column titled "Clarifies Reliability Standards" with a maximum value of 50.
<p>Response: In another forum others also suggested revising the column headings – the “Big 3” is another way of referencing cascading, uncontrolled separation and instability – unfortunately the column heading is too small for all those words. The headings will be changed to:</p> <p>100=Severe and widespread risk to reliability</p> <p>75=Moderate and widespread risk or scope</p> <p>25= small risk</p> <p>0= none</p>		

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 3 Comment
The Standards Committee did not adopt the suggestion to add another column for clarity. This concept is covered in the column I, "improves existing standard."		
Kansas City Power & Light	Yes	
TransAlta Centralia Generation, LLC	Yes	
Pepco Holdings Inc	Yes	
Southern California Edison Company	Yes	

4. Do you agree that the range (0-50) for four of the yellow columns, with the column identifying the investment already made in the project rated with a possible rating of 0-100? (columns j, k, l, m)

Summary Consideration: While there were suggestions for modifications to the ranges of some of the columns, the Standards Committee determined to retain the proposed ratings during the initial use of the tool. The intent of the yellow columns is to ‘add’ some ‘points’ to the base ratings assigned for the key reliability issues identified in the red and orange columns. If the ranges for the yellow columns are too small, then it is more likely that several projects will receive identical ratings, narrowing the breadth of the tool applicability. The Standards Committee will consider whether modifications are needed as the Standards Committee gains experience in applying the tool.

Organization	Yes or No	Question 4 Comment
MRO's NERC Standards Review Subcommittee	No	<p>Score should be the product of importance and urgency factors and the weighting of each score should be appropriate between these columns. Below are my specific issues:</p> <ol style="list-style-type: none"> Page 8 of 12 (“Process For Project Identification, Prioritization and Management”), section H (“Project Prioritization Tool Description”), Columns I, J, & K. The point spread for these columns doesn’t seem appropriate: a. Looking at the Columns I & H, a significant improvement in existing reliability standards is equal to filling/fixing a severe risk of the “Big Three” identified gap in reliability. b. Looking at the Columns I & F, a significant improvement in existing reliability standards is equal to meeting a time constrained directive.c. Looking at Columns J and K and comparing them to column H, the highest point spread is “50” for both Columns J & K. This spreadsheet appears to equate “standard committee processes” to “moderate risk or scope” of filling an identified reliability gap. Not sure why column "M" is needed, if an SDT is unable to address a topic wouldn't the next logical step be to ask the NERC staff, a requester, or the SDT to submit a SAR? Plus, this column ("M") appears to be in conflict with the BOT's instructions to the NERC Standards Committee in that the BOT indicated the NERC SC should focus its efforts and suspend efforts on developing interpretations. Doesn't a misinterpretation of a requirement create a compliance issue so wouldn't a failed interpretation be considered in that column ("I") only.

Response: 1. The version of the spreadsheet that was posted was color coded. The columns colored in red and orange collectively set a base value associated with reliability. The columns colored in yellow address a range of other factors that the Standards Committee needs to consider when determining whether to advance a project ahead of another project. There was no goal of trying to link all the columns to reliability.

2. Column M identifies another factor the SC must consider when determining how to prioritize a project. The Board of Trustees provided guidance indicating that

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 4 Comment
<p>if an interpretation drafting team can't develop an interpretation without modifying a standard or can't develop an interpretation because the request for an interpretation is seeking an answer to something that should, but isn't covered in a standard, then the drafting team should develop a SAR to 'fix' the standard. The 'fix' may not be related to a compliance issue.</p>		
<p>American Transmission Company</p>	<p>No</p>	<p>Each score should be the product of importance and urgency factors and the weighting of each score should be appropriate between these columns.</p>
<p>Response: The Standards Committee must consider many factors when trying to determine how to prioritize a project. There are many different ways of developing a summary score. Multiplying ratings is another way of obtaining a score for a project that could be ranked against other project scores. The designers of this project tool decided to sum, rather than multiply, a range of ratings. The range of ratings was intended to include the range of factors the Standards Committee must consider when determining the priority for a project.</p>		
<p>Kansas City Power & Light</p>	<p>No</p>	<p>Recommend elimination of the project completion as a factor in the process. Projects that are completed should be removed from the list and, all else being equal, as a project nears completion, the project priority will gravitate to the bottom of the priority bucket. It would be better to replace this with a factor considering whether a project is on schedule or not. The farther off schedule, the priority should rise for consideration of additional resources.</p>
<p>Response: Projects that have been completed through balloting are assigned a rating of 0 by the formula in column E – <i>Overall Priority Rating</i> – so that these projects fall to the bottom of the priority list. These projects will remain in the tool (with a zero ranking) to allow tracking by the Standards Committee through the adoption by the board, regulatory filing, and regulatory approvals.</p> <p>The intent of including the rating for project completion was to recognize that a project near completion has had a significant investment of industry resources. The negative impact of “sunk resources” is something the Standards Committee needs to consider. In the future, this column may not be needed – but for now where there are too many projects already under development and stakeholders have indicated that it can't manage completing all projects in parallel, it is necessary to determine which projects will move forward now and which projects need to wait before moving forward.</p>		
<p>Independent Electricity System Operator</p>	<p>No</p>	<p>As indicated above, the weight (max. score) of the yellow columns is too high relative to the maximum score of the orange columns, which we believe to be the most significant.</p> <p>Also, we believe the “Address Compliance Issues” column should be combined with the “Address Failed Interpretation...” column since they both address the issue of unclear requirements that may lead to compliance uncertainty. At the very least though, the “Address Compliance Issue” column should permit only discrete values, either 0 or 10 points.</p> <p>While we agree that recognition should be given to projects that are already “in flight” the maximum score in the “Percent Project Complete” column places too great an emphasis on such projects, equivalent to a project</p>

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 4 Comment
		<p>that has the greatest reliability impact. The significance of this item should be reduced and we propose the following scoring system: 20 points - Projects \geq 70% complete 15 points - Projects \geq 50% and < 70% complete 10 points - Projects \geq 30% and < 50% complete 5 points - Projects \geq 10% and < 30% complete 0 points - Projects < 10% complete</p>
<p>Response: The intent of the various yellow columns was to cover the range of issues (typically beyond reliability issues) the Standards Committee must consider when determining how to prioritize a project. The ratings need to be significant enough to move a project in one direction or another. If the yellow columns all had small ranges, then many projects would likely end up with identical ratings.</p> <p>The column for “Address Failed Interpretation” doesn’t necessarily cover the same issues addressed as “Address Compliance Issues.” A drafting team may not be able to develop an interpretation if a standard is unclear or doesn’t address a particular topic – but this doesn’t always mean that there are instances of noncompliance with the standard related to the lack of clarity.</p> <p>The percent complete is a factor that may not be needed in the future. Under the old standard development process, the Standards Committee was forced to accept all valid proposals for standard projects – and this resulted in far too many projects being started while others were still under development. Under the new standards process, the Standards Committee can delay the start of a new project. Now, however, the Standards Committee is faced with a situation where there are many projects that have had a significant investment of industry resources in their in their development, and the Standards Committee needs to weigh the value associated with completing that project against the value that could be obtained from completing another project. The investment made from drafting teams must be considered – the Standards Committee does not want to discourage the volunteers who have worked hard to develop standards and are near completion by directing these teams to stop work unless this is absolutely necessary. Consideration of the resources invested in a project is a factor the Standards Committee believes is valuable in determining the relative ranking to other projects.</p>		
Indeck Energy Services	No	<p>J assumes the priority of the other project. Should be rescaled to 20 points. K can be eliminated if a separate review process is established. L and M should be mutually exclusive, but then 50 points is OK. N should only be 50 (divide percentage complete by 2).</p>
<p>Response: J – agree – this does imply a dependent relationship where the other project has either been completed or is under development and assigned a high priority.</p> <p>K – the five-year review is a requirement for ANSI accreditation of the standards development process. This is one of the factors the Standards Committee must consider when determining what projects to advance.</p> <p>N – the intent of this rating is to weigh the value associated with completing a project against the value that could be obtained by completing another project. The use of the actual percent complete is a simple, objective measure that is easy to interpret.</p>		

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 4 Comment
SERC SC Standards Review Group	Yes	Consider increasing the relative weight of Coordinate changes with another project.
Response: After much deliberation, the use of this column was limited to projects that have implementation plans that rely upon one another.		
Bonneville Power Administration	Yes	Do we agree that the rating range should be (0-50), or do we agree that the rating range is appropriately assigned. We agree that a range of (0-50) is appropriate. It is difficult to answer the question given the different ways it could be interpreted.
Response: Agree that the question could have been phrased more clearly. Thank you for the feedback.		
Northeast Power Coordinating Council	Yes	
Arizona Public Service Company	Yes	
TransAlta Centralia Generation, LLC	Yes	
Manitoba Hydro	Yes	
Pepco Holdings Inc	Yes	
Duke Energy	Yes	
Southern California Edison Company	Yes	

5. Do you agree that the range (0-100) for the blue column in the tool?

Summary Consideration: Several stakeholders indicated that the “other” column was too open ended and advised against using this column to duplicate factors already considered in other columns. After much deliberation the Standards Committee has decided to use the “other” column only for factors not already considered in the other columns. When reviewing the prioritization ratings before and after this posting period, note the changes to the “other” column. Most of the values that were assigned have been removed; an example of a remaining “other” value is a rating of 50 for the Vegetation Management project to account for its value as the prototype results based standard. Ratings assigned for inclusion in the Blackout Report have been removed.

Organization	Yes or No	Question 5 Comment
MRO's NERC Standards Review Subcommittee	No	The NSRS agrees the concept of including an “other” column to be able to address any unforeseen, but significant factors. Because the “other” element is unknown, one can not be fully affirm that the range of (0-100) would always be appropriate. Plus, the tool allows column “O” to double count specific topics when double counting should not be allowed. For example the 2003 blackout report is double counted in column “G” and column “O”. Another example of this double counting is project 2007-17. Project 2007-17("Protection System Maintenance & Testing") has "25" assigned to it in the column "O" but the explanation for this "25" is that PRC-005-1 is "... one of the most violated standards and needs modified to clearly identify maintenance and testing requirements and intervals.", this explanation is already accounted for in the column "L".
<p>Response: Agree. After much deliberation the Standards Committee has decided to use the “other” column only for factors not already considered in the other columns. When reviewing the prioritization ratings before and after this posting period, note the changes to the “other” column. Most of the values that were assigned have been removed – an exception is a rating of 50 for the Vegetation Management project to account for its value as the prototype results based standard. Ratings assigned for inclusion in the Blackout Report have been removed.</p>		
Independent Electricity System Operator	No	The maximum is too high relative to the orange columns which we view as most significant (see above). As discussed in our response to Q6, each individual factor considered under “Other” should be given no more than 10 points and we believe the total should be capped at say 30 - 40 points to allow the orange columns to dominate the evaluation. Also, there should be discrete values or a pick list in the blue column. As things stand currently, the award of points in the blue column could be quite arbitrary and could therefore skew the ranking.
<p>Response: Agree that column O – Other Factor could potentially skew the overall project weight relative to the other columns. The Standards Committee has</p>		

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 5 Comment
determined to limit the use of this column so that it does not duplicate any other category on the spreadsheet.		
Bonneville Power Administration	Yes	Do we agree that the rating range should be (0-100), or do we agree that the rating range is appropriately assigned?. We agree that a range of (0-100) is appropriate, however this column really needs examples - it is too much of a wild card and could lead to ambiguity.
Response: The intent had been to ask if you agree with the range. The Standards Committee has determined to limit the use of this column so that it does not duplicate any other category on the spreadsheet.		
Arizona Public Service Company	No	AZPS would recommend a range of 0-50.
Response: Thank you for your opinion. Since most stakeholders who responded to this question indicated support for the range of up to 100, the SC did not change the range.		
American Transmission Company	No	ATC agrees the concept of including an “other” column to be able to address any unforeseen, but significant factors. Because the “other” element is unknown, one can not be fully affirm that the range of (0-100) would always be appropriate.
Response: Thank you for your opinion. The Standards Committee has determined to limit the use of this column so that it does not duplicate any other category on the spreadsheet.		
SERC SC Standards Review Group	Yes	
Northeast Power Coordinating Council	Yes	
Kansas City Power & Light	Yes	
TransAlta Centralia Generation, LLC	Yes	
Manitoba Hydro	Yes	
Pepco Holdings Inc	Yes	

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 5 Comment
Duke Energy	Yes	
Southern California Edison Company	Yes	
Indeck Energy Services	Yes	

6. What factors do you believe the Standards Committee should consider in the “Other” column?

Summary Consideration: Several stakeholders indicated that the “other” column was too open ended and advised against using this column to duplicate factors already considered in other columns. After much deliberation the Standards Committee has decided to use the “other” column only for factors not already considered in the other columns. When reviewing the prioritization ratings before and after this posting period, note the changes to the “other” column. Most of the values that were assigned have been removed; an example of a remaining “other” value is a rating of 50 for the Vegetation Management project to account for its value as the prototype results based standard.. Ratings assigned for inclusion in the Blackout Report have been removed.

Additional suggestions that have merit and will be considered are the following:

1. The relative level of emphasis placed upon current operational or planning issues as contrasted with previous level of emphasis, as evidenced by the number of points allowed for each, has merit and will be discussed to decide whether there is a valid reason for the values to differ.
2. FERC indicated, in the recent Reliability Prioritization Technical Conference, a willingness to explore ways to better coordinate and communicate the relative priorities of their directives; at least a partial acknowledgement that there may be differing levels of importance for various FERC directives. An interesting suggestion is to consider the adverse impacts. One aspect of adverse impacts is the possible results if there are identified reliability gaps to be addressed by the projects and those gaps are not closed. These are already addressed in one of the other columns. Another aspect suggested seems to be more related to the impacts upon the entities involved, rather than specifically related to the reliability aspects. Note that the GOTO project’s ratings were revised to more accurately reflect the project’s impact in closing reliability gaps, in improving existing standards, and in the need for coordination of implementation plans with other projects. It doesn’t seem appropriate to assume that impacts upon specific functional entities should be considered any different than other impacts upon other functional entities.

Organization	Question 6 Comment
Northeast Power Coordinating Council	The “Explanation” column “p” allows room for explanations of the ‘Other” column.
Response: Agree. This was the intent.	
MRO's NERC Standards Review Subcommittee	The Blackout report listed operational and planning issues that existed in 2003. Since current operational or planning issues are not considered as important (Column G, Question 1, an “other operational or planning” issue is assigned 4 points) as past issues (Column G, Question 1, a blackout report issue is assigned 9 points), the NSRS would recommend adding points

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Question 6 Comment
	<p>to the “Other” column for current operational or planning issues. For example, the percentage of misoperations of protection systems has been increasing over the years that have preceded the 2003 blackout report. The 2009 Long Term Reliability Assessment reported in “Figure Trends 2” (page 361) that misoperations were less than 10% in 2006, in 2007 they were less than 40%, in 2008 they were greater than 50%. Over several years, The NERC committees of RAPA and SPCTF and the NERC assessment staff of NERC (they create the LTRA) have all indicated that misoperations is a problem. Thus, current operational or planning issues should be considered in the “other” column.</p>
<p>Response: After much deliberation the Standards Committee has decided to use the “other” column only for factors not already considered in the other columns. In the example of misoperations – this is already assessed by indicating that completing the associated project would close a reliability gap. However, the suggestion about the relative level of emphasis placed upon current operational or planning issues, as evidenced by the number of points allowed for each, has merit and will be discussed to decide whether there is a valid reason for the values to differ.</p>	
<p>Industry members of the Generation Verification Standard Drafting Team</p>	<p>Priorities of FERC staff should be considered - not just formal FERC directives. Also, efforts that will aid in removing barriers to the reliable interconnection of variable resources (wind, solar, etc) as identified in NERC’s special report “Accommodating High Levels of Variable Generation” should be considered.</p>
<p>Response: FERC directives are already addressed in either the column to close a reliability gap or to improve an existing standard, or in both of those columns. FERC indicated, in the recent Reliability Prioritization Technical Conference, a willingness to explore ways to better coordinate and communicate the relative priorities of their directives; at least a partial acknowledgement that there may be differing levels of importance for various FERC directives.</p>	
<p>Bonneville Power Administration</p>	<p>The “Other” column is a wild card and could cover a wide range of factors. It might help if examples were provided.</p>
<p>Response: Agree. After much deliberation the Standards Committee has decided to use the “other” column only for factors not already considered in the other columns. An example was assigning some points to the Vegetation Management project as this project has value as the prototype for results based standards.</p>	
<p>Kansas City Power & Light</p>	<p>No other comments.</p>
<p>TransAlta Centralia Generation, LLC</p>	<p>TransAlta would like to see another column added which captures the adverse impacts of the issue. For example, Project 2010-07 Transmission Requirements at the Generator Interface has a very significant adverse impact on the generation entities that are registered as Transmission Owners (TO) and Transmission Operators (TOPs). Additionally this is an issue</p>

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Question 6 Comment
	<p>that impacts all generator owners and operators, meaning it potentially impacts a very large number of registered entities. The issues are spelled out in more detail in the Final Report from the Ad Hoc Group for Generator Requirements at the Transmission Interface. If a column such as this were added, TransAlta would argue for a ranking of 80 to 100 on a scale of 0 to 100.</p>
<p>Response: This is an interesting suggestion. One aspect of adverse impacts are the possible results if there are identified reliability gaps to be addressed by the projects and those gaps are not closed. These are already addressed in one of the other columns. The aspect you seem to be suggesting would be more related to the impacts upon the entities involved, rather than specifically related to the reliability aspects. Note that the GOTO project's ratings were revised to more accurately reflect the project's impact in closing reliability gaps, in improving existing standards, and in the need for coordination of implementation plans with other projects. It doesn't seem appropriate to assume that impacts upon specific functional entities should be considered any different than other impacts upon other functional entities.</p>	
<p>Manitoba Hydro</p>	<ul style="list-style-type: none"> - Industry need - Response to a new technology - Project is being used as the proof-of-concept - Implement recommendations from event analysis (eg. Blackout) - Project is clarifying or creating a definition which is needed for a high priority standard currently under development.
<p>Response: Agree. After much deliberation the Standards Committee has decided to use the "other" column only for factors not already considered in the other columns. The blackout report recommendations close reliability gaps and are addressed in one of the other columns; similar response for new technology closing a gap. The use of the "other" column to highlight Vegetation Management as the proof-of-concept project for results-based was adopted. Not sure how to assess industry need. If you have specific suggestions on how the Standards Committee could assess industry need, please provide your suggestion to one of the Standards Committee members.</p>	
<p>American Transmission Company</p>	<p>None at this time.</p>
<p>Response: Thank you.</p>	
<p>Duke Energy</p>	<p>Projects with active field trials should receive "other" points. This could also be used to address instances where projects have been combined, such as Projects 2007-18 Reliability-based Control and Project 2007-05 Balancing Authority Control. These resulted in Project 2010-14 Balancing Authority Reliability-based Control, which has a deceptively low rating in column</p>

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Question 6 Comment
	N (project percent complete).
<p>Response: This is an aspect the SC had not considered. The SC will add this to the list of factors that may be considered in the “Other” column. If the ratings for % complete are not correct, please make a specific recommendation for a correction.</p>	
Independent Electricity System Operator	<p>We suggest considering the following under the “Other” category: The length of time a particular project has been in the queue. A project may have been listed for some time but due to priority considerations it has either not commenced or has been halted so that no substantial progress has been made. This consideration should garner say 10 - 15 points after ‘n’ years (n=2 or 3), not too many, but a sufficient number to push it up a few places in the priority ranking if its reliability merit is strong. Another item for consideration under “Other” is the breadth of impact of the project on registered entities e.g. the change to the BES definition would impact all registered entities. A small number of points should be awarded for this consideration say 10 points.</p>
<p>Response: This is a good suggestion and the SC will add this to the list of factors that may be considered in the “Other” column.</p>	
Midwest ISO	<p>None of the existing columns should be duplicated or double-counted in this column. For example, Project 2007-17 has 25 in this column because it is one of the most violated standards but column I already accounts for compliance issues.</p>
<p>Response: Agree. After much deliberation the Standards Committee has decided to use the “other” column only for factors not already considered in the other columns.</p>	

7. Proposed Ratings for Projects Included in the Reliability Standard Development Plan: Please review the ratings assigned to each of the individual projects. If you feel that any of the draft ratings are inaccurate, please identify the project number and the specific rating that you believe is inaccurate. Please be specific in identifying what you believe is the correct rating, and provide a justification for that proposed rating.

Summary Consideration:

There were several suggestions for modifications to project ratings. Adjustments were made to the ratings for the following projects:

- Project 2007-17 – Protection System Maintenance and Testing
- Project 2007-02 – Operating Personnel Communications Protocols
- Project 2007-06 – System Protection Coordination
- Project 2007-09 – Generator Verification
- Project 2009-01 – Disturbance and Sabotage Reporting
- Project 2010-07 –Transmission Requirements at the Generator Interface
- Project 2010-14 –Balancing Authority Reliability-based Control
- Project 2010-17 – Definition of BES
- Project 2012-02 –Physical Protection

Organization	Yes or No	Question 7 Comment
SERC SC Standards Review Group		The Short Descriptions do not provide enough information to recommend any specific changes in ratings.
Response: Longer descriptions are available. All of the projects are described in the Reliability Standard Development Plan.		
MRO's NERC Standards Review Subcommittee		The NSRS disagrees with the values. While there are numbers assigned to each category, there is still subjectivity built into each choice and the NSRS would have made different decisions on a number of these. Assuming others would have varying opinions also, they will end up with different results depending on who is

Organization	Yes or No	Question 7 Comment
		<p>filling out the spreadsheet. Our specific concerns with each project:</p> <p>1. Project 2007-17("Protection System Maintenance & Testing") has "25" assigned to it in the column "O" but the explanation for this "25" is that PRC-005-1 is "... one of the most violated standards and needs to be modified to clearly identify maintenance and testing requirements and intervals.", this explanation is already accounted for in the column "L". (50 points were assigned in column "L")</p> <p>Response: Agree. The "25" in column O was changed to "0"</p> <p>2. Project 2007-11 ("Disturbance Monitoring") is assigned a "50" in the column "H"; it should be a "0" since Digital Fault Recorder's are used for monitoring not protection. Fault recorder data is typically collected after an event not during the event and would not immediately resolve an event since the data needs to be assessed collectively. They are comparable to PMU. (project 2009-04)</p> <p>Response: Although fault data is collected and used after the fact, it is still used for reliability and its use does lead to improvements in reliability.</p> <p>3. Project 2007-06 ("System Protection Coordination") has a zero in column "H", not sure why. Coordination is serious. Lack of coordination is a contributing factor in the 2003 blackout report (the blackout report references "relay loadability" which means the relays were not appropriately coordinated). Lack of coordination was also a contributing factor to the eastern interconnection blackout that occurred in the 60's and caused the formation of NERC. Right now, maintenance and testing of protection system is given higher priority than coordination. It seems to me that NERC has misallocated its resources if it believes coordination is less important than maintenance and testing. If a protection system is not designed and coordinated properly, you can maintain and test it all you want it still will not work appropriately. The NSRS would recommend a "100" for column H ("Fill an identified gap in reliability").</p> <p>Response: The rating for column H was changed from a "0" to a "50." This seemed equivalent to the gap associated with Frequency Response and Protection System Maintenance.</p> <p>4. Project 2006-04 ("Assess Transmission and Future Needs") has a zero in column "H". For the same reasons the NSRS stated in the comment above, #3, I would recommend a "100" for column H ("Fill an identified gap in reliability"). If you don't plan out your system, then it will not operate as expected. If you are an operator you want the system to operate as planned and expected. System operators need to have real-time tools available to ensure that they have exposure to their system in order for them to maintain situational awareness and provide an adequate level of reliability.</p> <p>Response: Because most of the TPL standards are already enforceable, it isn't clear that there is a gap in</p>

Organization	Yes or No	Question 7 Comment
		<p>reliability caused by the lack of an enforceable standard.</p> <p>5. Project 2007-03 (“Real-time Transmission Operations”) has a zero in column “H”. For the reasons stated in the 2003 blackout report, the NSRS would recommend a “100” for column H (“Fill an identified gap in reliability”).</p> <p>Response: Because all of the standards in this Real-time Operations project are already enforceable, it isn’t clear that there is a gap in reliability caused by the lack of an enforceable standard.</p> <p>6. Project 2007-12 (“Frequency Response”) has a zero in column “J” (“Coordinate changes with another project”). The NSRS recommends a “30” since this project is expected to spawn another project where generators will have to submit data. The current project only addresses creating a standard for BAs and TOPs. The existing standard and the future standard will need to be coordinated.</p> <p>Response: The Standards Committee limited the use of column J to just those projects that have implementation plans that are dependent upon other implementation plans. While the output of the Frequency Response standard may be used by other standards, at this point, the implementation plans are not interdependent.</p> <p>7. Project 2010-05 (“Protection System”) has a “50” in column “H” (“Fill an identified gap in reliability”). The NSRS recommends a “100” for the reasons stated in comments #3 and #4. If your protection system is not designed appropriately than you have a reliability gap. Specifically, NERC has observed a reliability gap to exist in misoperations of protection systems. The percentage of misoperations of protection systems has been increasing over the years that have preceded the 2003 blackout report. The 2009 Long Term Reliability Assessment reported in “Figure Trends 2” (page 361) that misoperations were less than 10% in 2006, in 2007 they were less than 40%, in 2008 they were greater than 50%. Over several years, The NERC committees of RAPA and SPCTF and the NERC assessment staff of NERC (they create the LTRA) have all indicated that misoperations is a reliability gap.</p> <p>Response: The rating of “50” is equivalent to the ratings assigned to the gap associated with Frequency Response and Protection System Maintenance. We believe this project represents a moderate risk.</p> <p>8. Also, Project 2010-05 has a zero in column J (“Coordination changes with another project”). Technically speaking, this coordination would be with project 2007-06 (“Protection System Coordination”), project 2006-02 (“Assess Transmission and Future Needs”), project 2007-03 (“Real-time Transmission Operations”), and project 2006-04 (“Backup Facilities”), project 2009-03 (“Emergency Operations”), etc. Thus, the NSRS would recommend at least “30” in column J.</p> <p>Response: The implementation plan for Project 2010-05 is not anticipated to be dependent on any other</p>

Organization	Yes or No	Question 7 Comment
		<p>implementation plan, therefore the zero was not changed.</p> <p>9. Project 2006-06 (“Reliability Coordination”). Column H (“Fill an identified gap in reliability”) has a zero, if the Reliability Coordinator is performing acts to prevent instability, uncontrolled separation or cascading outages how would this not be filling a reliability gap? The NSRS would recommend a “100” for this column. Response: The intent of the ‘gap’ column is to identify projects that will add requirements to address identified reliability gaps. This column is not assessing the real time impact of implementing the associated requirements.</p> <p>10. Project 2007-02 (“Operating Personnel Communications Protocols”). Column H (“Fill an identified gap in reliability”) has a zero, if the Reliability Coordinator/Transmission Operators are performing acts to prevent instability, uncontrolled separation or cascading outages shouldn’t they use a standard communications protocol, how would this not be filling a reliability gap? The NSRS would recommend a “100” for this column. Response: This was changed to “50” to recognize that this project is adding requirements to address a blackout recommendation.</p> <p>11. Project 2010-14 (“Balancing Authority Reliability-based Control”). Column H (“Fill an identified gap in reliability”) has a zero. It looks like it should be higher than zero. Response: This was changed to “50” to recognize that this project is adding requirements to improve frequency control.</p> <p>12. Project 2009-01 (“Disturbance and Sabotage Reporting”). Column H (“Fill an identified gap in reliability”) has a zero. According to the NERC definition of adequate levels of reliability, security is a factor of reliable operation of the BES. Since this project defines what a sabotage is, it seems only appropriate that column H be higher than “0”. Since physical security is an imminent threat to hard assets, this number should be at least 75. This project covers reporting and situational awareness for effected entities and others, not to mention informing the RC, NERC and the DOE. The Blackout Report speaks of assuring that communications are enabled at all times and the passing of information is very important to our Electric System’s reliability. Response: This was changed to “75” to recognize that this project is adding requirements and expanding the scope of responsibility.</p> <p>Project 2012-02 (“Physical Protection”) Column H (“Fill an identified gap in reliability”) has a zero. According to</p>

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 7 Comment
		<p>the NERC definition of adequate levels of reliability, security is a factor of reliable operation of the BES. It seems only appropriate that column H be higher than “0”.</p> <p>Response: This was changed to a “50” to recognize that this project is adding requirements.</p>
<p>Response: Please see in-line responses.</p>		
<p>Industry members of the Generation Verification Standard Drafting Team</p>		<p>The GV SDT believes that the following columns are understated for Project 2007-09:</p> <p>Column H: Fill an identified gap in reliabilityProject 2007-09 includes 6 standards:</p> <ul style="list-style-type: none"> o MOD-027: Verification of Models and Data for Turbine/Governor and Load Control of Active Power/Frequency Control Functions o MOD-026: Verification of Models and Data for Generator Excitation Control System Functions o PRC-019: Coordination of Generator Voltage Regulator Controls with Unit Capabilities and Protection o PRC-024: Generator Performance During Frequency and Voltage Excursions o MOD-024: Verification of Generator Gross and Net Real Power Capability o MOD-025: Verification of Generator Gross and Net Reactive Power Capability <p>Note that two of these standards, MOD-027 and PRC-024, deal directly with generator frequency response capability: a critical reliability need identified through FERC technical conferences and orders as discussed below. A third standard, MOD-024 (which is being combined with MOD-025), also deals with generator real power capability and verifying that expected reserves will actually be available. The other three standards provide the complementary reactive power capability verification and protection and control coordination. The GV SDT believes that the Project 2007-09 has been incorrectly rated in the SC_Prioritization Worksheet. The GV suite of standards addresses multiple identified gaps in reliability. Even though all of these standards do include requirements that are applicable to Generator Owners, they are a diverse set of standards addressing multiple reliability issues. The combination of all the reliability gaps in all of these standards should be reflected in the assignment of a value of 100 in this column, as opposed to the current assigned value of 0.</p> <p>Response: The value was modified from “0” to “75”</p> <p>Following are some specific examples of reliability gaps that the GV suite of standards address:The development of MOD-024 and MOD-025 address the verification of generator steady state MW and Mvar capability. Currently, there is no continent wide standard requiring the verification of these capabilities. The existing standards are “fill in the blank “ standards which have not been approved by FERC. Model verification is critical in helping ensure that security assessments appropriately bound transmissions system</p>

Organization	Yes or No	Question 7 Comment
		<p>security limits. Specifically, inaccurate generator steady state models contribute to inaccuracies between power system models and actual power system operation, including inaccurate long term voltage level or stability limits. In the “Final Report on the August 14, 2003 Blackout in the United States and Canada: Causes and Recommendations”, recommendation #24 states “Improve quality of system modeling data and data exchange practices.” The report goes on to state that “Viable ...generator testing programs are necessary to improve agreement between power flows and dynamic simulations and the actual system performance.” Additionally, there are numerous FERC Order 693 directives regarding these standards (paragraphs 1308, 1310, 1311, 1312, 1320, 1321, and 1322). Until a continent wide generator steady state model verification standard is developed and implemented, a reliability gap will exist. The development of MOD-026 and MOD-027 address the verification of excitation control system models and speed / load control system models. Currently, there is no continent wide standard requiring the verification of these generator dynamic models. Model verification of this generation equipment results in models that more accurately predict the response of the actual in service equipment. Subsequently, dynamic simulations studies would be expected to result in more accurate transmissions system security limits. Specifically, if inaccurate models contribute to overly optimistic security limits, the transmission system could unknowingly be operated in an insecure state. In the “Final Report on the August 14, 2003 Blackout in the United States and Canada: Causes and Recommendations”, recommendation #24 states “Improve quality of system modeling data and data exchange practices.” The report goes on to state that “Viable ...generator testing programs are necessary to improve agreement between power flows and dynamic simulations and the actual system performance.” Additionally, the NERC Board of Trustees approved February 2004 recommendations from the NERC Steering Group (reference Recommendation 14) which calls for the validation of data used in dynamic simulations by bench marking the model data with actual system performance - which is exactly what is being required in the current draft versions of MOD-026 and MOD-027. Until a continent wide dynamic model verification standard is developed and implemented, a reliability gap will exist.</p> <p>Representatives of the GV SDT met with FERC staff at their offices in Washington DC on May 28, 2009. During that meeting, FERC staff pointed out that Order 693 contained an implicit requirement that generators must be able to “ride through” defined voltage or frequency excursions. FERC staff emphasized that if a unit is expected to trip as a result of a voltage or frequency excursion, then in order to satisfy TPL requirements of a “valid simulation” which matches reality, the unit must be modeled as tripping to reflect that reality. Furthermore, FERC staff stated that Order 661a (addressing wind generation) was based on what existing conventional generators could do today. The logic was that existing units could already meet the performance specified in Order 661a, and as such, placed all generation technologies on a level playing field. Specifically, in Paragraph 1787 Order 693 states (portions underlined for emphasis) “ In the NOPR, the Commission identified an implicit assumption in the TPL Reliability Standards that all generators are required to ride through the same types of voltage disturbances and remain in service after the fault is cleared. This implicit assumption should be made explicit.Accordingly, the Commission directs the ERO to modify the Reliability Standard to explicitly require either that all generators are capable of riding through the same set of</p>

Organization	Yes or No	Question 7 Comment
		<p>Category B and C contingencies, as required by wind generators in Order No. 661, or that those generators that cannot ride through be simulated as tripping. If a generator trips due to low voltage from a single contingency, the initial trip of the faulted element and the resulting trip of the generator would be governed by Category B contingencies and performance criteria.” PRC-024 addresses the implicit performance requirements for units stated in Order 693. Thus, the development of PRC-024 will close a current reliability gap - which is to mitigate overly optimistic TPL assessments that do not take into account the potential inability of units to ride through defined voltage and/or frequency excursions. The development of PRC-024 and MOD-027 will result in helping to close the reliability gap regarding the exposure of transmission reliability to un-recoverable frequency excursions. As discussed above, PRC-024 will require that generators be able to stay on line for off nominal under and over frequency withstand curves - or make their inability to withstand these frequency excursions known to the appropriate Transmission Planner. The PRC-024 sub team is coordinating with the PRC-006-1 UFLS SDT. Suspension of the PRC-024 effort would result in underfrequency load shedding studies having over optimistic assumptions regarding the ability of generators to stay on line during frequency excursions. Also, MOD-027 calls for verification of Turbine/Governor and Load Control or Active Power/Frequency Control models. The lack of accurate dynamic models would result in the reliability gap of underfrequency load shedding studies having either over optimistic or too pessimistic assumptions regarding the ability of generators to participate in mitigating frequency excursions. Also, frequency response is declining. This topic has become very visible with recent activities such as the FERC Frequency Technical Conference (Fall 2010) and the Frequency Response SDT efforts to determine the reasons behind the decline in frequency response. The verification of these dynamic models will provide confidence in the assessment of generator’s expected participation in frequency response. The development of PRC-019 will result in requiring a periodic generation coordination study which will ensure that a generator’s exciter protection and control settings are properly coordinated. The upcoming draft standard will also propose a requirement that will ensure that these coordinated settings are actually implemented. Without such a study, the generator could be subjected either to an insecure or un-reliable trip, which can expand a contingency and result in cascading. The proper coordinated control and protection settings of generators will address the reliability gap of possible mis-coordination that is not addressed in PRC-001.</p> <p>Column I: Improves existing reliability standardsThe development of MOD-024 and MOD-025 address the verification of generator steady state MW and Mvar capability. Currently, there is no continent wide standard requiring the verification of these capabilities. The existing standards are “fill in the blank “ standards which have been NERC B.O.T. approved but they have not been approved by FERC. Therefore, there is a current “compliance mismatch” since they have not received regulatory approval in the US, but these standards are in effect in jurisdictions where regulatory approval is not required (i.e., some Canadian provinces). Model verification helps ensure that security assessments appropriately bound transmissions system security limits. Specifically, inaccurate generator steady state models contribute to inaccuracies between power system models and actual power system operation, including inaccurate long term voltage level or stability limits. The drafting of these standards will also address the following FERC directives which emphasize the need for</p>

Organization	Yes or No	Question 7 Comment
		<p>accurate generator steady state models:</p> <ul style="list-style-type: none"> o In Order 693, paragraph 1310 states “we direct the ERO to develop appropriate requirements to document test conditions and the relationships between test conditions and generator output so that the amount of power that can be expected to be delivered from a generator at different conditions, such as peak summer conditions, can be determined.” o In order 693, paragraph 1321 states “we adjust the proposal in the NOPR and direct the ERO to modify MOD-025-1 to require verification of reactive power capability at multiple points over a unit’s operating range.” Until a continent-wide generator steady state model verification standard is developed and implemented, a reliability gap will exist. Therefore, the GV SDT believes that these standards would at least be “moderately improved” and thus should be assigned a value of 75 instead of 50. <p>Response: The gap in reliability has been addressed in column H, as requested in the previous section.</p> <p>Column K: Scheduled for its 5 year review in:For the column “Scheduled for its 5 year review...”, the BOT approval date for MOD-024 is effective date is January 1, 2007. The BOT adoption date is earlier. Thus, this standard is scheduled for its 5 year review in less than one year. (January 1, 2012). As discussed above, there are outstanding governmental directives. Thus, per the current version of the Standards Process Manual, if the GV SDT effort was not already in progress, a 5 year review to consider modifying the standard would be expected. As such, the GV cell for this column should contain a value of 50 instead of the current value of 25.</p> <p>Response: At the time the prioritization was underway, the 1-2 year timeframe was appropriate. Future prioritizations will update this information.</p> <p>Column N: Percent CompleteThe GV SDT believes the 38% completion percentage value is too low. The GV SDT is currently developing 5 standards (MOD-024 and 025 will be combined). 3 postings have occurred to date. One of the outcomes of a recent full team meeting (Feb. 2011) is that the team will be proceeding with formal postings for all 5 of its standards. As such, subsequent formal postings and successive balloting should begin late this year. Also, two of the standards which address prominent reliability gaps have already completed a formal posting (MOD-026 and PRC-024). Since the effort began in late 2007, the GV SDT contends that the entire effort is approximately 60% complete. Additionally, GV SDT believes that MOD-026 and PRC-024 are closer to 75% complete. At an absolute minimum, the SC should allow work on MOD-026 and PRC-024 to continue since these two standards are arguably the ones in the GV suite of standards</p>

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 7 Comment
		<p>closest to completion and they fill significant reliability gaps previously discussed above.</p> <p>Response: The percent complete is a statistic taken from NERC's project management software, and is not a subjective value. However, the SC will consider adjustments to the use of this element in future revisions to the prioritization process.</p> <p>Column P: Other Factor This Generation Verification 2007-09 project was identified by FERC reliability staff as being one of their high priority projects. One of the big reasons is that this project addresses a reliability gap that will become larger with the increasing penetration of variable resources. Specifically, as quoted in NERC's special report "Accommodating High Levels of Variable Generation", one of the conclusions is that "Standard, non-confidential and non-proprietary power flow and stability models are needed to support improved planning efforts and appropriately account for new variable resources." All of the GV SDT's draft proposed standards are technology neutral, and as such, require the development and implementation of these non-confidential and non-proprietary models. As such, it is recommended that this project be assigned a value of at least "50" in the "Other Factor" column.</p> <p>Response: The Standards Committee adjusted several of the ratings for the Generator Verification project. Adjustments were made to reliability gap and coordination columns. The Standards Committee tried to be consistent in applying similar scores for similar circumstances and did not make other changes proposed. The percent complete is taken from the reports provided by drafting teams each month. The Standards Committee has determined to limit the use of Column O for factors that aren't already measured through the other columns. The reliability improvements associated with these standards is already addressed in the 'gap' column.</p>
<p>Response: Please see in-line responses.</p>		
Bonneville Power Administration		<p>BPA has the following suggested changes:</p> <p>Definition of BES has 100 in column h for reliability gap. This is a definition - an administrative item - not a reliability gap. The system is already reliable with or without this Definition. This will do nothing to close an actual reliability gap. Column i properly identifies BES definition as having zero impact on improving current Reliability Standards column h. should reflect that as well.</p> <p>Project 2007-17 Protection System Maintenance & Testing: PRC-005-1BPA believes that the OTHER FACTOR column o rating should be 0, not 25. BPA does not agree with the explanation in column p stating</p>

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 7 Comment
		<p>that PRC-005 needs modified to “clearly identify maintenance and testing requirements and intervals”. Registered entities individually define their own maintenance and testing requirements and intervals and provide a basis for their maintenance and testing requirements and intervals.</p> <p>Project 2007-07 Vegetation Management: FAC-003-1BPA believes that the reliability gap column h rating should be 75, not 0. FAC-003-1 is among the most violated standards. If a rewritten standard is deemed to “improve the existing reliability standard” (rated as 50 in column i), BPA believes that the rewritten standard also “fills an identified gap in reliability”, as demonstrated by the “proof-of-concept for the results-based reliability standards initiative” comment in column p.</p>
<p>Response: The rating for the BES Definition for reliability gap was changed from 100 to 75. The improvement in the definition is expected to close a gap by being more specific about what facilities must be covered by NERC’s reliability standards.</p> <p>The rating in the Other column for Project 2007-17 was changed to zero as you suggested.</p> <p>The rating for Project 2007-07 was not changed. If the standard were adding new requirements that expanded the scope of the existing already approved requirements, then it would be appropriate to add a value to the column for “reliability gap”.</p>		
Kansas City Power & Light		No other comments. Project ranking results look in line.
<p>Response: Thank you for your supportive comment. Several stakeholders provided substantial reasons for adjusting some of the ratings and the SC has done so – please review the revised spreadsheet to see what was changed.</p>		
TransAlta Centralia Generation, LLC		TransAlta is happy with the ranking of #6 for Project 2010-07 Transmission Requirements at the Generator Interface as currently shown on the spreadsheet.
<p>Response: Thank you for your supportive comment. Several stakeholders provided substantial reasons for adjusting some of the ratings and the SC has done so – please review the revised spreadsheet to see what was changed.</p>		
Manitoba Hydro		BES Definition - This project scored a 0 in the ‘Improving Existing Reliability Standards’ category. The BES Definition has a major impact on all reliability standards and the score in this category should be changed to 100 as a result.

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 7 Comment
<p>Response: The rating for the BES Definition for improving existing reliability standards was changed from 0 to 50. While improvements are expected by adding clarity on what facilities are covered by NERC's reliability standards, this should not be a major impact on all reliability standards. Several standards already include specific language to limit the scope of requirements to a subset of all BES facilities.</p>		
<p>American Transmission Company</p>		<p>In reviewing the numbers for Project 2007-17 (PRC-005-2), ATC disagrees with the values. While there are numbers assigned to each category, there is still subjectivity built into each choice and ATC would have made different decisions on a number of these. Assuming others would have varying opinions also, they will end up with different results depending on who is filling out the spreadsheet.</p>
<p>Response: The SC agrees that there is subjectivity in the scoring. The SC will work to address this concern in future revisions to the tool.</p>		
<p>Duke Energy</p>		<p>Project 2007-09 Generator Verification should have 25 points in column H (fill an identified gap in reliability). Reactive resources especially are very important to the integrity of the BES, and as such it is highly important that reactive capabilities are validated (i.e., the values being assumed in planning studies and operations have a proven basis in reality).</p> <p>Project 2010-14 Balancing Authority Reliability-based Control and Project 2007-12 Frequency Response should have 50 points in column J (coordinate changes with another project) because these two projects need to be coordinated."Changing resource mix" and "Integration of new technologies" in the top NERC priorities hit heavily in the area of resource control and Project 2010-14 Balancing Authority Reliability-based Control is needed in addressing those priorities. The draft Balancing Authority ACE Limit ("BAAL") is intended to replace CPS2 under BAL-001. Participating Balancing Authorities under the BAAL Field Trial with highly variable loads have found the BAAL to be a much more practical control performance standard; similar results may be realized by Balancing Authorities integrating variable energy resources. The BAAL is more demanding than CPS2 when it needs to be, and less demanding as system frequency gets closer to 60 Hz. The SAR for Reliability-based Control goes into more detail on the reliability benefits of the proposed standard, however the economic benefits of reducing unnecessary generation control actions are also substantial. Part of the implementation of the Frequency Response Standard will include a gradual decrease in the minimum Frequency Bias Setting closer to the BA's average of the estimated frequency response over the year. With that decrease will come a tightening of the bounds for CPS1, CPS2 and the draft BAAL. Preliminary work has indicated that a reduction in the Frequency Bias Setting of 50% could result in a drop in CPS2 performance by over 20% with the bounds cut in half, requiring a significant increase in control actions and regulation capability in order to achieve at least 90% CPS2 performance. The importance of having the industry under BAAL moves from BAAL being a superior reliability metric, to it being commercially significant with the risk of CPS2 limits getting smaller and smaller. Though the CPS1 and BAAL bounds also get tighter, operation in support of Interconnection frequency is always the right answer under those metrics. With the exception of the CIP and FRR work, we are not aware of other standards that will</p>

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 7 Comment
		<p>have as profound of an impact on the industry. In our opinion, it would be a disservice to the industry, not to mention the standard drafting team members and the participating Balancing Authorities who have spent considerable time in support of the development of the draft Standard, to let Project 2010-14 be put on the back burner. We urge the Standards Committee to consider the substantial work that has been done in support of the draft Standards and allow the work to continue toward the scheduled posting this year.</p>
<p>Response: The score for Project 2007-09 for Column H was changed to a 75 based on input from the Generator Verification SDT.</p> <p>While Project 2010-14 may use some output from Project 2007-12, the two implementation plans are not expected to be interdependent, thus the score was not changed.</p>		
<p>American Wind Energy Association</p>		<p>I would echo the concerns expressed in GVSDT drafts that Project 2007-09 contains a number of standards development processes that are addressing issues for which continent-wide standards are critically needed, and thus the prioritization of Project 2007-09 should be increased accordingly. These important components of Project 2007-09 include:</p> <ul style="list-style-type: none"> o MOD-027: Verification of Models and Data for Turbine/Governor and Load Control of Active Power/Frequency Control Functions o MOD-026: Verification of Models and Data for Generator Excitation Control System Functions o PRC-019: Coordination of Generator Voltage Regulator Controls with Unit Capabilities and Protection o PRC-024: Generator Performance During Frequency and Voltage Excursions o MOD-024: Verification of Generator Gross and Net Real Power Capability o MOD-025: Verification of Generator Gross and Net Reactive Power Capability
<p>Response: The Standards Committee modified several of the scores assigned to the Generator Verification project.</p>		
<p>Independent Electricity System Operator</p>		<p>We would have expected Project 2010-17 - Definition of the Bulk Electric System, to finish higher in the ranking given the broad impact this work may have on all reliability standards and Regions. Looking closer at the points assigned and comparing with the four projects ranked above it, we observe that (1) the duplication in the orange columns and (2) the excessive weighting given to the “Project Percent Complete” column, both commented on above, significantly influenced the outcome.</p> <p>Project 2007-01 - Underfrequency Load Shedding and Project 2007-07 - Transmission Vegetation Management also appear to be ranked somewhat low at 16th and 18th respectively. In the case of the first the issue is moot since the project is almost complete but it’s ranking would have been much lower has it not been for its “Project Percent Complete” score. This outcome may be because the reliability significance of this work has not been well represented because the weights need to be redistributed as discussed above.</p>
<p>Response: Some of the ratings for the BES project were adjusted, but it landed in the list of ‘top 10’ projects both before and after the adjustments.</p>		

Organization	Yes or No	Question 7 Comment
<p>The Underfrequency Loadshedding Project did not receive many comments, primarily because this has been balloted.</p> <p>The Transmission Vegetation Management project is in a successive ballot and did not receive many comments.</p>		
<p>Indeck Energy Services</p>		<p>Project 2007-12’s description is bad. The RE’s need to figure out what frequency response they need and how to measure when they are getting it and from whom. NERC issued an Alert to get the data.</p> <p>Response: We agree this description needs to be updated, and it will be changed in the next prioritization.</p> <p>BES Definition scores 100 for a regulatory deadline and 100 for an identified gap. These are one and the same, although the significance of the gap is small risk at best. There are few if any NPCC entities which haven’t registered, except in Canada which isn’t subject to the FERC directive and has consistently rejected the concept of a bright line definition in favor of the NPCC approach to assess reliability significance. How can the gap be severe risk of Big Three? Only small entities are not already registered. Someone is fantasizing that the Standards program is missing large numbers of large entities, which is patently false.</p> <p>Response: The Standards Committee does not agree that meeting the ERO’s obligation by completing the project by its due date is the same as filling a reliability gap. The FERC Order that directed NERC to revise the definition of BES included specific examples where FERC believes the existing definition is causing a potential gap with respect to clarity on what facilities need to be addressed by reliability standards.</p> <p>Giving it 25 points for 5 year review is a stretch because it isn’t a standard and it is doubtful that all definitions will be reviewed by an SDT every 5 years. It is unclear what compliance issues could be addressed when everyone is in compliance with the existing definition and only a few will be added with a new definition. It should probably get 50 points for Percent Complete. Final Priority Rating should be 175. Therefore, it should be completed because of the regulatory deadline.</p> <p>Response: The rating for the 5-year review was corrected – it was changed to 0 as proposed.</p> <p>The Percent Complete is based on data within NERC’s project management software. Since this project has just been initiated, it is not 50% complete.</p> <p>Project 2010-07 points out that there is a missing factor. In this case, one Region, WECC, is registering GO/GOP’s as TO/TOP’s. No other Region has done so. This conflict between Regions is another factor. It may not occur often, but in this case is worth 25 or 50 points for this project. This is similar to the Failed</p>

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 7 Comment
		<p>Interpretation and possibly could be lumped into that category with revised language.</p> <p>Response: Several of the ratings for the GOTO project were adjusted. See the revised scores.</p> <p>Project 2007-06 received 100 points for Improves Reliability Standards Significantly. Protection Systems have been around for a long time. Some relay engineers might like more or different ones, but the ones we have work. Therefore, any improvement in the standards will be Minimal at best.</p> <p>Response: Project 2007-06 requires coordination beyond what is required today, which is critical to ensuring effective local protection while at the same time providing BES reliability. Accordingly, we believe 100 points to be appropriate.</p> <p>Project 2007-03 received 75 points for Moderately Improving Standards. These standards are being minimally or incrementally improved. Receiving 50 points for coordinating with other projects seems out of balance with the other categories. This may be worth 10 or 20 point maximum, but isn't as important as a Gap with Moderate Risk.</p> <p>Response: The Standards Committee tried to be consistent in applying similar scores for similar circumstances – in the case of Project 2007-03, the implementation plan for this set of standards is integrated with the implementation plan for 2006-06 – Reliability Coordination.</p>
<p>Response: Please see in-line responses.</p>		
<p>NERC Transmission Issue Subcommittee (TIS)</p>		<p>Generally, a number of projects that support 2003 Blackout recommendations are not noted in "Other." Similarly, a number of the projects are subject to regulatory directives that are not covered in the ratings. The TIS did not try to correct all of those issues, but are commenting on those projects that come under the area of TIS responsibility.</p> <p>Response: The Standards Committee determined that it will not use the "Other" category to add ratings that are duplicated through other columns. The blackout report recommendations identify gaps or necessary improvements to reliability – and these are addressed in column h or column i.</p> <p>The numbers in the TIS recommendations below are potentially conservative in the</p>

Organization	Yes or No	Question 7 Comment
		<p>implications to the reliability of the BES. The TIS did not intend to deliberately move their projects into the top ten, but did try to give a more complete picture of the importance of those projects to reliability.</p> <p>Project 2010-03 Modeling Data</p> <p>The NERC Transmission Issues Subcommittee (TIS) believes that modeling is very under-rated in the Standard Committee prioritization. In fact, without proper modeling, the planning and operational studies called for in a number of the Standards projects such as Project 2006-02 Assess Transmission and Future Needs and Project 2010-10 FAC Order 729, may yield incomplete or incorrect results.</p> <p>The scoring for this project is also incorrect. The regulatory direction in Order 693, in paragraphs 1215 and 1222, charges the ERO with improving modeling. This was also prescribed in the recommendations of NERC and the US-Canada Task Force related to the 2003 Blackout, Recommendations 14 and 24, respectively.</p> <p>From Order 693</p> <p>Paragraph 1215 – "...We direct the ERO to: (1) modify the Reliability Standard through the Reliability Standards development process to require actual system events be simulated and model output validated against actual system responses and (2) develop a Work Plan and submit a compliance filing that will enable validation of the steady-state models while MOD-014-0 is being modified."</p> <p>Paragraph 1222 – "...We therefore direct the ERO to use its authority pursuant to § 39.2(d) of our regulations to require users, owners and operators to provide to the Regional Entity the validated dynamics system models while MOD-015-0 is being modified. We require the ERO to develop a Work Plan that will enable continual validation of dynamics system models and submit a compliance filing with the Commission."</p> <p>Specifically, TIS recommends:</p>

Organization	Yes or No	Question 7 Comment
		<p>1. "Address regulatory directives without a time-constraint" score should be 50.</p> <p>2. "Improves existing reliability standards" score should be 75.</p> <p>3. "Coordinate changes with another project" score should be 40.</p> <p>4. "Other Factors" should be at least 50. The need for improved generator data was highlighted in the recent FERC report "Use of Frequency Response Metrics to Assess the Planning and Operating Requirements for Reliable Integration of Variable Renewable Generation"</p> <p>Response: The rating in the column for addressing regulatory directives without a time constraint is based on an assessment of the number and type of directives associated with the project.</p> <p>Based on the ratings assigned to other projects for improvements, the rating of 50 for improves existing standards seems appropriate.</p> <p>The use of the 'coordination" column is limited to coordination of implementation plans between standard development projects.</p> <p>The Other factors column is only used for items not addressed elsewhere. In addition – the generator verification project is already working to develop improved generator modeling data.</p> <p>Project 2008-01 Voltage and Reactive Planning and Control</p> <p>This project was initiated to meet recommendations from the 2003 blackout report by the US-Canada Task Force. Further, this project is subject to directives to the ERO under FERC Order 693, paragraphs 1854 through 1879, and summarized in paragraph 1880:</p> <p>Summary Determination:</p> <p>Paragraph 1880 – "...the Commission directs the ERO to develop a modification to VAR-001-1 through the Reliability Standards development process that:</p>

Organization	Yes or No	Question 7 Comment
		<p>(1) expands the applicability to include reliability coordinators and LSEs;</p> <p>(2) includes detailed and definitive requirements on “established limits” and “sufficient reactive resources” as discussed above, and identifies acceptable margins above the voltage instability points;</p> <p>(3) includes Requirements to perform voltage stability analysis periodically, using online techniques where commercially available and offline techniques where online techniques are not available, to assist real-time operations, for areas susceptible to voltage instability;</p> <p>(4) includes controllable load among the reactive resources to satisfy reactive requirements and</p> <p>(5) addresses the power factor range at the interface between LSEs and the transmission grid.”</p> <p>Therefore, its “Address regulatory directives without a time-constraint” score should be 100.</p> <p>As such, TIS recommends:</p> <ol style="list-style-type: none"> 1. “Address regulatory directives without a time-constraint” score should be 50. 2. “Fill an identified gap in reliability” score should be 75. 3. “Improves existing reliability standards” score should be 75. Expands the applicability as directed by FERC. 4. “Coordinate changes with another project” score should be 50. Coordinates with planning related projects such as Project 2006-02 Assess Transmission Future Needs (TPL-001-2). 5. “Other Factors” should be at least 50. The issue of Voltage and Reactive planning was subject of NERC and the US-Canada Task Force reports on the 2003 Blackout, recommendations 7 and 23, respectively. <p>Response: The rating in the column for addressing regulatory directives without a time constraint is based on an assessment of the number and type of directives associated with the</p>

Organization	Yes or No	Question 7 Comment
		<p>project.</p> <p>Based on the ratings assigned to other projects for improvements, the rating of 50 for improves existing standards seems appropriate.</p> <p>The use of the ‘coordination” column is limited to coordination of implementation plans between standard development projects.</p> <p>The Other factors column is only used for items not addressed elsewhere. Reliability gaps and improvements are already addressed in other columns.</p> <p>Project 2007-09 Generator Verification</p> <p>The success of this project has significant benefit and immediate impact on the quality of modeling information on generators.</p> <p>As such, TIS recommends:</p> <ol style="list-style-type: none"> 1. “Fill an identified gap in reliability” score should be 75. 2. “Improves existing reliability standards” score should be 100 (we currently don’t have verified data). 3. “Coordinate changes with another project” score should be 50 (coordinates with all modeling-related projects). 4. “Other Factors” should be at least 50. The need for improved generator data was highlighted in the recent FERC report “Use of Frequency Response Metrics to Assess the Planning and Operating Requirements for Reliable Integration of Variable Renewable Generation.” <p>Response: The rating for filling in a reliability gap was changed to 75.</p> <p>The use of the ‘coordination” column is limited to coordination of implementation plans between standard development projects.</p> <p>While “improve existing reliability standards” may need to be increased, the project is already</p>

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 7 Comment
		<p>ranked within the top set of projects to continue in Formal Development. This number will be reconsidered during the next prioritization.</p> <p>The Other factors column is only used for items not addressed elsewhere. Reliability gaps and improvements are already addressed in other columns.</p>
<p>Response: Please see in-line responses.</p>		

8. Please provide any other comments you feel would be beneficial to the Standards Committee in making improvements to the reference document and project prioritization tool.

Summary Consideration: The Standards Committee considers the project prioritization tool to be a ‘work in progress’ and has used the tool to establish a set of 10-12 projects as ‘high priority’ for 2011. The intent is to post the tool and its results for stakeholders to review on a periodic basis.

One stakeholder suggested that as new projects are proposed, they should be posted and rated by stakeholders. The Standards Committee believes that this would create an unnecessary administrative burden on the personnel involved; a better way to handle this would be to channel industry feedback on project priorities through the appropriate segment representatives on the Standards Committee. The Standards Committee is elected to represent stakeholders and is assigned responsibility, through its charter, to manage the progress of projects, including prioritization.

Another stakeholder noted that there were no explanations regarding the scoring values. The Standards Committee will update the associated document “Process to Identify, Prioritize and Monitor Standard Project” to provide more detail to the rationale for the scoring values, and revise the tool to consider additional factors as appropriate.

Organization	Yes or No	Question 8 Comment
SERC SC Standards Review Group		Industry input from a survey on the priorities of the projects should be added as an additional column, with a maximum rating of 100. Re-title column "p" to "Explanation of Other Factor Rating." Add a separate "Comment" column. The comments expressed herein represent a consensus of the views of the above-named members of the SERC SC Standards Review Group only and should not be construed as the position of SERC Reliability Corporation, its board, or its officers.
<p>Response: The Standards Committee is charged with responsibility for managing the prioritization and progress of standards and does not intend, at this time, to conduct another survey to solicit additional feedback on the project priorities. Future industry feedback on project priorities should be addressed through the appropriate segment representatives on the Standards Committee.</p>		
Northeast Power Coordinating Council		In NERC’s 2011 Plan, there are 17 Priority Standards identified. This exceeds the resources available, quoting from p. 5 Section 3, “Recent Standards Committee and NERC staff experience generally supports the conclusion that NERC and the industry can manage the development of no more than ten to twelve standards projects under active development at any one time. ... our informed judgment is that attempts to develop more than ten or twelve projects during the same period will result in an actual loss of throughput and/or a reduction

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 8 Comment
		<p>in standards quality.</p> <p>”There are no explanations supporting the scoring values. Why is one criteria worth 10 while another 25 or 100? Weighted Criteria-Based Scoring Systems for Project Management, under Resource Constraints, are widely used to select and prioritize projects. Generally, the projected sum-of-the-projects results are indicative of some bottom-line measure, like impact on profits. Here the bottom-line impact on reliability is only indirectly indicated through the very qualitative unsupported values assigned to the various criteria/measures, e.g., 10, 25 or 100. Shouldn’t some more quantitative Reliability measure be used for scoring, such as some threshold improvement in LOLP or a minimum benefit/cost ratio, e.g., 1.2:1? Why are certain cells highlighted yellow in the body of the Prioritization Tool?</p>
<p>Response: The Standards Committee agrees that managing 10-12 projects at one time is the current ideal threshold.</p> <p>The intent in the project prioritization tool was to share with stakeholders the factors the Standards Committee considers when determining how to prioritize standards development. The Standards Committee has an obligation to help the ERO address all outstanding regulatory directives and maintain ANSI accreditation – so adding ratings to assess things other than the ‘bottom line’ (reliability impact) is within the Standards Committee’s scope of responsibility.</p> <p>The Standards Committee will update the associated document “Process to Identify, Prioritize and Monitor Standard Project” when the prioritization tool is updated to provide more detail to the rationale for the scoring values, and revise the tool to consider additional factors as appropriate.</p>		
MRO's NERC Standards Review Subcommittee		<p>a. The NSRS appreciates NERC’s efforts to develop a prioritization guide and tool to prioritize Reliability Standards in a more consistent and objective manner. This first version is a reasonable start and we suggest that NERC provide ongoing opportunities for the industry to suggest further improvements and refinement to the guide and tool.</p> <p>b. The NSRS would like to know who will be rating each project and will the industry have an opportunity to weigh in on these decisions?</p> <p>c. Regarding Column N: Percent Complete. The NSRS requests that the SC clarify that when a project nears completion, the priority for its completion should be raised. In this tool, the value in Column N (percent completed), is added directly to the prioritization total.</p> <p>d. It's not clear to me that the Blackout Report is referenced correctly. Project 2009-04 has "25" assigned to it in the column “O” and the explanation is the 2003 Blackout Report but other topics in the blackout report don't have this like assignment. For example, protection system coordination was mentioned in the blackout report but the projects associated with protection system coordination are not assigned "25" like the project 2009-04. The wanting protection system projects are 2007-06 (2006-02 maybe by inference), 2010-05, 2010-13, 2007-09, 2007-01, 2008-02, & 2009-07, etc.</p>

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 8 Comment
<p>Response: The Standards Committee considers this tool to be a 'work in progress' and expects that experience will lead to improvements. The intent is to post the tool and its results for stakeholders to review on a periodic basis.</p> <p>The Standards Committee has invited stakeholders to assist it in assigning ratings. As envisioned, new projects will probably be highlighted during updates to the Reliability Standards Development plan – and stakeholders will have an opportunity to weigh in on those project plans at that time.</p> <p>The project completion column was intended to provide the Standards Committee with information to help determine how large an investment a drafting team has already made in a project.</p> <p>The Standards Committee decided to limit its use of Column O for factors not considered elsewhere. Weights associated with blackout report recommendations have been changed to "0" in Column O since the reliability improvement associated with addressing a blackout recommendation is already assessed in other columns.</p>		
<p>IRC Standards Review Committee</p>		<p>The SRC supports the concept and methodology proposed in the NERC Standards Committee's Process for Standards Project Identification, Prioritization and Monitoring. The SRC fully supports the creation of a management process that would be applied to all NERC Projects, as a valuable and necessary initiative. The SRC also believes that an accepted priority assignment process will provide a more transparent and objective justification for reducing and eliminating the expenditure of resources on low priority projects.</p>
<p>Response: Thank you for your support.</p>		
<p>Industry members of the Generation Verification Standard Drafting Team</p>		<p>The GV-SDT respectfully points out that the current team is sufficiently staffed to continue to move their suite of standards forward. All 5 standards (assuming industry agrees with the combination of MOD-024 and MOD-025) are currently undergoing the second round of NERC staff review in preparation for formal postings. Formal postings and successive balloting could occur as early as later this year. Suspending the effort for a year would almost certainly be disruptive to the makeup of the team (retirements, changes in responsibilities or companies, etc) - arguably more so than other efforts that have a smaller, less diverse set of standards to develop. The impact of team dynamics and current staffing of drafting team efforts should somehow be factored into the spreadsheet.</p>
<p>Response: The Standards Committee is sensitive to the huge investment the Generator Verification SDT has already made in this project – from the initial start with the Phase III & IV project, the field tests that were conducted and analyzed, and the new standards that have been developed. Note that based on your feedback and the feedback of others, several ratings were adjusted and this project has risen in the rankings.</p>		
<p>Bonneville Power Administration</p>		<p>BPA believes that this tool appears to be a thorough, rigorous process to clearly establish much needed priorities. We support the effort, especially in light of the recognized "limited resources". We are also limited in the number of staff available to review, participate (drafting teams) and comment on all the efforts afoot at</p>

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 8 Comment
		times, so seeing an established process to prioritize is a welcome step.
Response: Thank you for your support.		
Kansas City Power & Light		No other comments.
Edison Electric Institute		<p>On behalf of its member companies, Edison Electric Institute (EEI) is pleased to provide the following brief comments on the proposed tool under development to assist the NERC Standards Committee (SC) in its efforts to set priorities for standards development projects.</p> <p>First, EEI applauds the initiative of the NERC SC in seeking to develop this prioritization tool. It is becoming clearer with experience that the practical limits of the standards development process is approximately 10-15 projects at any one time, depending on the size and complexity of the projects. ‘Throwing resources’ at standards development projects does not overcome the need to deliberately set technical requirements, and the need to exercise careful due diligence to ensure that issues of interrelatedness are considered within and among the various technical requirements in the standards.</p> <p>Response: The Standards Committee agrees with this conclusion.</p> <p>Second, EEI believes that the proposed tool design is adequate for separating ‘high,’ ‘medium,’ and ‘low’ priorities. Having strong confidence in a tool that can make these gradations is far more important than the specific project ranking. EEI also encourages the SC to consider defining a general category for projects not needing to be developed. We draw from our observations of the February 8 FERC technical conference the clear conclusion that NERC should explicitly acknowledge that some projects do not merit development.</p> <p>Response: The Standards Committee is still working on its approach to dealing with projects that are under development but are not in the ‘high’ category. The committee must balance the investment made by the industry and the drafting team with the need to manage workloads – it is seeking alternatives that may allow some drafting teams that are in the ‘medium’ category to continue with productive work that would not burden the industry but would allow the team to continue to move forward with its project and not lose its investment.</p> <p>Third, EEI agrees with the recognition of two variables as having significant influence in the rankings --- the existence of time-based regulatory directives, and the existence of clearly defined reliability gaps. Both of these variables merit the weight recommended in the spreadsheet in determining project priorities.</p> <p>Response: The Standards Committee agrees with this conclusion.</p>

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 8 Comment
		<p>Fourth, EEI recommends that the SC remain flexible in its use of the tool. SC should allow itself a trial period. In addition, while the tool can help inform priorities, the SC should allow for the possibility that the tool may place an unrealistic premium or discount on a particular project. It will be important to recognize the tool as informative but not necessarily a final authority on setting priorities. In other words, it will always be important to ask ‘does this make sense’ as a final check on the rankings.</p> <p>Response: The Standards Committee considers this tool to be a ‘work in progress’ and expects that experience will lead to improvements. The intent is to post the tool and its results for stakeholders to review on a periodic basis.</p> <p>Fifth, and as a transition matter, EEI also strongly recommends that the introduction of the prioritization tool not interrupt progress on standards development projects that may be ‘near the finish line.’ We have not performed a careful review, but expect that there are likely projects near completion that the spreadsheet would indicate as having a low priority. These projects deserve continued support to completion.</p> <p>Response: The Standards Committee is sensitive to the huge investment the teams have already made and has identified a few projects that are near completion and expects to allow these teams to complete their projects, even if they aren’t rated in the ‘top 10.’</p> <p>Beyond the prioritization tool itself, EEI continues to encourage NERC to continue development of an enterprise-wide initiative to develop corporate strategic priorities informed by bulk power system reliability goals and risks, and the potential cost effectiveness of addressing such risks. Over time, EEI believes that such an initiative would inform business decisions for both NERC core programs, standards development and compliance enforcement. EEI also uses these comments to continue encouraging NERC and stakeholders to develop a regular practice, where standards development, and compliance and enforcement, can share experiences for the purpose of informing standards development projects. A regular discipline for this form of a feedback loop would be helpful for informing both identifying areas in the standards that need attention, and the priority needing to be assigned to those areas.</p> <p>Response: The Standards Committee supports this initiative and is committed to working with the technical committees, as a first step, to refine the definition of ALR so that we all have a common understanding of the performance we are trying to achieve.</p>
<p>Response: Please see in-line responses.</p>		
Arizona Public Service Company		<p>Column K (Scheduled for its 5 year review): This column should only apply to FERC approved standards and should have a value of zero for non FERC approved standards.</p>

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 8 Comment
<p>Response: The five-year review is not related to FERC approval – it is one of the “essential elements” to quality as an ANSI accredited standard developer.</p>		
Pepco Holdings Inc		<p>PHI supports this project. Additionally PHI supports the EEI comments on this project. The associated document seems to cover the mechanics of use of the tool and defines the various criteria and weights. It provides a good means to rank the projects in some sort of relative order. It does not cover the process that would overlay the use of the tool. For example: To some degree the application of the parameters and the associated weights are subjective. A process for oversight, guidance or consensus should be developed to ensure consistency of application across the projects. Additionally, the tool is probably not the “final “ answer on priority but only one major piece of information used to make an informed judgment to the overall prioritization. That process should be defined. A test period and a reevaluation of the criteria and weights should be defined.</p>
<p>Response: Thank you for your supportive comments. The Standards Committee considers the tool to be a ‘work in progress’ and expects to refine the tool and add more specificity to the criteria for assignment of weights as it gains experience in using the tool. The Project Prioritization Tool provides the Standards Committee a starting point for prioritizing standards project, but the committee reserves the right to adjust those priorities on other factors.</p>		
American Transmission Company		<p>a. ATC appreciates NERC’s efforts to develop a prioritization guide and tool to prioritize Reliability Standards in a more consistent and objective manner. This first version is a reasonable start and we suggest that NERC provide ongoing opportunities for the industry to suggest further improvements and refinement to the guide and tool.</p> <p>b. ATC would like to know who will be rating each project and will the industry have an opportunity to weigh in on these decisions?</p> <p>c. Regarding Column N: Percent Complete. ATC requests that the SC clarify that when a project nears completion, the priority for its completion should be raised. In this tool, the value in Column N (percent completed), is added directly to the prioritization total.</p>
<p>Response: Thank you for your supportive comments. The Standards Committee considers the tool to be a ‘work in progress’ and expects to refine the tool and add more specificity to the criteria for assignment of weights as it gains experience in using the tool.</p> <p>The Standards Committee has invited stakeholders to assist it in assigning ratings. As envisioned, new projects will probably be highlighted during updates to the Reliability Standards Development plan – and stakeholders will have an opportunity to weigh in on those project plans at that time.</p> <p>The project completion column was intended to provide the Standards Committee with information to help determine how large an investment a drafting team has already made in a project.</p>		

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 8 Comment
Duke Energy		<p>It appears the numbers in column G are incorrect. The description says that it is the Directive Index for the Project times two, but it does not appear that the index value has been multiplied by 2 since there are odd numbers in that column (such as a 5 for Project 2007-12 - had it been multiplied by two one would expect an even number). The multiplication does not appear to have been done in the formula for column F, either. Projects that have changes that need to be coordinated should be specifically identified in a note or comment. Overall, Duke Energy commends the Standards Committee for developing a prioritization tool and we believe that this will be useful. All efforts do need to be made to communicate that this is a tool for the SC use and the priorities will not be cast in stone or be used to supersede SC judgment, so for this reason does not need to be perfectly comprehensive.</p>
<p>Response: There is a complex formula for determining the numbers that appear in the 'directives' column and the formula was not shown correctly in the documents that were posted for stakeholder review. This has been corrected in the revised reference document.</p> <p>Ratings for coordination of projects were limited to those that are associated with implementation plans that rely on one another.</p> <p>As noted, this is a tool, and is intended to be used as one factor in determining how to manage the work.</p>		
Independent Electricity System Operator		<p>Please see our response to Q2.IESO fully supports the Standards Committee's efforts to develop the prioritization tool that would promote objectivity when defining industry priorities in relation to standards development. We hope you find our comments helpful.</p>
<p>Response: Thank you for your supportive response. While the SC did not adopt all of your suggestions, it did consider all of them.</p>		
Midwest ISO		<p>Overall, we do not have major issues with the priorities and tool as they are designed and we believe it represents a reasonable attempt to prioritize standards work. The Standards Committee should periodically revisit the tool and consider adjustments as we learn more as well. Furthermore, we encourage the Standards Committee to document and make transparent when changes are made and the work that started out the year as highest priority is no longer the highest priority. Industry needs to be able to see and understand the drivers for the changes in priorities. One could argue that filling a reliability gap is the single most important column because reliability is purpose of the standards. Thus, some considerations should be given to raising this factor significantly.</p>
<p>Response: Thank you for your supportive comments. The Standards Committee considers the tool to be a 'work in progress' and expects to refine the tool and add more specificity to the criteria for assignment of weights as it gains experience in using the tool. The Project Prioritization Tool provides the Standards Committee a starting point for prioritizing standards project, but the committee reserves the right to adjust those priorities on other factors.</p>		

Consideration of Comments on the SC – Draft Standard Prioritization Tool and Associated Reference Document

Organization	Yes or No	Question 8 Comment
Indeck Energy Services		There are no projects on the list that should receive more than 50 points for Gap (H) and Improves Reliability (I) combined. Even cyber security is not a significant impact on reliability. If distorted values are used, then the tool only persists in validating pre-conceived ideas of what should be done first. Objectivity will be very difficult.
Response: There are instances where a project does close a gap and does improve an existing standard. The two are not always the same.		

Exhibit E

Final Project Prioritization Tool

**NERC Standards Committee
Project Prioritization Worksheet**

STANDARDS COMMITTEE Reliability Standard Project Prioritization				(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
				Click Here to Sort Projects by Priority			Click Here to Insert a Row		Cells with this color are blank and need a value entered.					
Priority Number	Project Number and Name	Short Description	Overall Priority Rating	Meet a time-constrained regulatory directive due in: (100) < 12 mo. (75) < 18 mo. (50) > 18 mo.	Address regulatory directives without a time-constraint (Directive Index for Project times two, with 0 to 50 range)	Fill an identified gap in reliability 100 = severe risk of "Big Three" 75 = moderate and widespread 50 = moderate risk or scope 25 = small risk 0 = none	Improves existing reliability standards: 100 = Significantly 75 = Moderately 50 = Incrementally 25 = Minimally 0 = none	Coordinate changes with another project: 50 = Immediately 40 = in 1 to 2 years 30 = in more than 2 years 0 = none needed	Scheduled for its 5 year review in: 50 = 1 year or less 25 = 1 to 2 years 15 = 2 to 3 years 0 = over 3 years	Address compliance issues (0 to 50)	Address failed interpretation or SDT inability to develop an interpretation 50 = major gap 25 = moderate 10 = admin 0 = none	Project Percent Complete per NERC @Task Software (0 to 100)	OTHER FACTOR (Explanation for the rating must be indicated in the column to the right) (0 to 100)	Explanation
1	Project 2008-06 Cyber Security - Order 706 (1) 419	This is the second phase (Phase 2) of Project 2008-06 Cyber Security Order 706. The project requires modifications to CIP-002 thru CIP-009 not included in Phase 1 of the project to bring the standards into conformance with the ERO Rules of Procedure and to address the directives from FERC Order 706.	371	0	50	75	100	0	25	0	50	71	0	
2	Project 2007-17 Protection System Maintenance & Testing (2) 363	Transmission and Generation Protection System Maintenance and Testing, to consolidate PRC-005-1, PRC-008-0 — Underfrequency Load Shedding Equipment Maintenance Programs; PRC-011-0 — UVLS System Maintenance and Testing; and PRC-017-0 — Special Protection System Maintenance and Testing into a single maintenance and testing standard. Standards PRC-008-0, PRC-011-0, and PRC-017-0 would then be withdrawn.	338	0	8	50	100	0	25	50	50	55	0	
3	Project 2007-06 System Protection Coordination (3) 284	Requires upgrading and expanding the existing requirements to identify criteria for determining where to install protection system devices and for requiring the installation of those devices to protect the reliability of the bulk electric system.	289	0	0	50	100	0	25	0	50	64	0	
4	Project 2010-07 Transmission Requirements at the Generator Interface (6) 250	This project proposes changes to the requirements and the addition of new requirements to add significant clarity to Generator Owners and Generator Operators regarding their reliability standard obligations at the interface with the interconnected grid.	275	0	0	75	75	50	25	50	0	0	0	
5	Project 2007-12 Frequency Response (7) 238	Requires entities to provide data needed to model each interconnection's frequency response.	265	75	5	50	100	0	25	0	0	10	0	
6	Project 2007-02 Operating Personnel Communications Protocols (10) 210	Requires developing new requirements in support of blackout recommendation #26 to ensure that real-time system operators use standard communication protocols during normal and emergency operations.	260	0	8	50	75	50	25	0	0	52	0	
7	Project 2006-02 Assess Transmission and Future Needs (4) 250	Requires assessments and plans to determine if the bulk power system meets specified performance requirements under varied theoretical operating conditions to meet present and future system needs.	250	0	22	0	75	50	25	0	0	78	0	
8	BES Definition (5) 250	BES Definition	250	100	0	75	50	0	0	25	0	0	0	
9	Project 2007-03 Real-time Transmission Operations (16) 194	Requires upgrading and expanding existing requirements that address balancing authority responsibilities to ensure a balance between load, interchange and generation within its balancing authority area in support of interconnection frequency. Requires upgrading and expanding existing requirements that address transmission operator responsibilities to ensure the real-time operating reliability of the transmission assets within the transmission operator's area.	244	0	22	0	75	50	25	0	0	72	0	
10	Project 2007-09 Generator Verification (23) 117	Requires upgrading existing requirements for generators to verify their capabilities to ensure that accurate data is used in model to assess the bulk electric system.	242	0	4	75	50	50	25	0	0	38	0	
11	Project 2009-01 Disturbance and Sabotage Reporting (24) 108	This project will entail revision to existing standards CIP-001 and EOP-004. The standards may be merged to eliminate redundancy and provide clarity on sabotage events. EOP-004 has some fill-in-the-blank components to eliminate. The development may include other improvements to the standards deemed appropriate by the drafting team, with the consensus of stakeholders, consistent with establishing high quality, enforceable and technically sufficient bulk power system reliability standards.	235	0	8	75	25		25	50	0	52	0	

**NERC Standards Committee
Project Prioritization Worksheet**

STANDARDS COMMITTEE Reliability Standard Project Prioritization				(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
				Click Here to Sort Projects by Priority			Click Here to Insert a Row		Cells with this color are blank and need a value entered.					
Priority Number	Project Number and Name	Short Description	Overall Priority Rating	Meet a time-constrained regulatory directive due in: (100) < 12 mo. (75) < 18 mo. (50) > 18 mo.	Address regulatory directives without a time-constraint (Directive Index for Project times two, with 0 to 50 range)	Fill an identified gap in reliability 100 = severe risk of "Big Three" 75 = moderate and widespread 50 = moderate risk or scope 25 = small risk 0 = none	Improves existing reliability standards: 100 = Significantly 75 = Moderately 50 = Incrementally 25 = Minimally 0 = none	Coordinate changes with another project: 50 = Immediately 40 = in 1 to 2 years 30 = in more than 2 years 0 = none needed	Scheduled for its 5 year review in: 50 = 1 year or less 25 = 1 to 2 years 15 = 2 to 3 years 0 = over 3 years	Address compliance issues (0 to 50)	Address failed interpretation or SDT inability to develop an interpretation 50 = major gap 25 = moderate 10 = admin 0 = none	Project Percent Complete per NERC @Task Software (0 to 100)	OTHER FACTOR (Explanation for the rating must be indicated in the column to the right) (0 to 100)	Explanation
12	Project 2010-05 Protection Systems (6) 237	Modify current PRC standards and definitions related to Protection System Misoperations to support a good metric for measurement of Protection System performance and ensure the reliability of the bulk power system.	227	0	2	50	100	0	25	50	0	0		
13	Project 2006-06 Reliability Coordination (12) 205	Requires upgrading and expanding existing requirements that address reliability coordinator actions to prevent instability, uncontrolled separation or cascading outages.	217	0	12	0	50	50	25	0	0	80	0	
14	Project 2010-14 Balancing Authority Reliability-based Control (21) 152	Requires upgrading existing requirements to ensure that balancing authorities take actions to maintain interconnection frequency with each balancing authority contributing its fair share of frequency control. Also requires corrective action by the BA when excessive Area Control Error may be contributing to or causing action to be taken to correct an SOL/IROL problem, to prevent interconnection frequency excursions of short duration attributed to the ramping of on and off-peak interchange transactions, and to support timely transmission congestion relief by requiring corrective load/generation management by the Balancing Authority(ies) within a defined timeframe when participating in transmission loading relief procedures.	212	0	1	50	75	0	25	0	50	11	0	
15	Project 2007-07 Vegetation Management (18) 163	Requires upgrading the existing requirements for entities to implement a vegetation management program to prevent transmission outages that adversely impact the reliability of the bulk electric system.	211	0	11	0	50	0	25	0	0	75	50	This project is being used as the proof-of-concept for the results-based reliability standards initiative. <i>Also includes alternative approaches to VRFs and VSLs that need industry consideration.</i>
16	Project 2007-11 Disturbance Monitoring (11) 207	Requires upgrading and expanding existing requirements for entities to install disturbance monitoring equipment and report disturbance data to ensure information is available to analyze bulk power system disturbances.	207	0	1	50	75	0	25	0	0	56	0	
17	Project 2008-01 Voltage and Reactive Planning and Control (22) 134	This project supports a blackout recommendation. Industry debate is needed on whether there should be a North American standard that requires a specific amount of reserves, or whether requirements for specific reserves should continue to be addressed at the regional level. The requirements in the existing standards need to be upgraded to be more specific in defining voltage and reactive power schedules. Consideration should be given to adding a requirement for the Reliability Coordinator to monitor and take action if reactive power falls outside identified limits.	206	0	12	50	50	0	25	20	0	49	0	
18	Project 2010-13 Relay Loadability Order (15) 196	Modify PRC-023-1 Transmission Relay Loadability standard and maybe other standards in compliance with the FERC Order 733 issued on March 18, 2010.	197	100	10	25	50	0	0	0	0	12	0	
19	Project 2009-02 Real-time Reliability Monitoring and Analysis Capabilities (27) 100	The new standard or standards will establish requirements for the functionality, performance, and management of Real-time tools for Reliability Coordinators, Transmission Operators, and Balancing Authorities for use by their System Operators in support of reliable System operations.	189	0	2	75	50	0	25	0	0	37	0	
20	Project 2009-03 Emergency Operations (17) 170	This set of EOP standards may be merged into a single standard. There are some requirements in IRO-001 that may be improved and merged into the new "merged" EOP standard.	170	0	19	0	50	0	25	0	50	26	0	
21	Project 2008-12 Coordinate Interchange Standards (20) 158	Revise the set of Coordinate Interchange standards to ensure that each requirement is assigned to an owner, operator or user of the bulk power system, and not to a tool used to coordinate interchange, to address the Interchange Subcommittee's concerns related to the Dynamic Transfers and Pseudo-ties, and to address previously identified stakeholder comments and applicable directives from Order 693.	158	0	4	50	25	0	25	25	0	29	0	

**NERC Standards Committee
Project Prioritization Worksheet**

STANDARDS COMMITTEE Reliability Standard Project Prioritization				(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
				Click Here to Sort Projects by Priority			Click Here to Insert a Row		Cells with this color are blank and need a value entered.					
Priority Number	Project Number and Name	Short Description	Overall Priority Rating	Meet a time-constrained regulatory directive due in: (100) < 12 mo. (75) < 18 mo. (50) > 18 mo.	Address regulatory directives without a time-constraint (Directive Index for Project times two, with 0 to 50 range)	Fill an identified gap in reliability 100 = severe risk of "Big Three" 75 = moderate and widespread 50 = moderate risk or scope 25 = small risk 0 = none	Improves existing reliability standards: 100 = Significantly 75 = Moderately 50 = Incrementally 25 = Minimally 0 = none	Coordinate changes with another project: 50 = Immediately 40 = in 1 to 2 years 30 = in more than 2 years 0 = none needed	Scheduled for its 5 year review in: 50 = 1 year or less 25 = 1 to 2 years 15 = 2 to 3 years 0 = over 3 years	Address compliance issues (0 to 50)	Address failed interpretation or SDT inability to develop an interpretation 50 = major gap 25 = moderate 10 = admin 0 = none	Project Percent Complete per NERC @Task Software (0 to 100)	OTHER FACTOR (Explanation for the rating must be indicated in the column to the right) (0 to 100)	Explanation
22	Project 2010-01 Support Personnel Training (33)	Require the use of a systematic approach to determining training needs of generator operators and operations planning and support staff with a direct impact on the reliable operations of the bulk power system.	126	100	1	25	0	0	0	0	0	0	0	
23	Project 2009-04 Phasor Measurements (19)	Supports a blackout recommendation. Several industry studies were issued that need to be analyzed to determine appropriate requirements for a NERC standard.	113	0	38	75	0	0	0	0	0	0	0	
24	Project 2008-02 Undervoltage Load Shedding (25) 104	Consider consolidating PRC-010-0 — Assessment of the Design and Effectiveness of UVLS Program and PRC-022-1 — Under-Voltage Load Shedding Program Performance. Missing are any criteria for identifying where UVLS should be installed. The team will utilize the FIDVR (Fault-Induced Delayed Voltage Recovery) Technical Reference Paper in the development of requirements.	104	0	4	0	75	0	25	0	0	0	0	Needs to go after 2008-01
25	Project 2009-07 Reliability of Protection Systems (26)	Requires facility owners to have protection system equipment installed such that, if there were a failure to a specified component of that protection system, the failure would not prevent meeting the BES performance identified in the TPL standards.	100	0	0	0	100	0	0	0	0	0	0	Needs status and justification - may be fixed by other projects
26	Project 2010-08 Functional Model Glossary Revisions (28)	The Functional Model Working Group (FMWG) has received many comments and questions from stakeholders concerning the differences in definitions between the Functional Model and the NERC Glossary of Terms Used in Reliability Standards. This project is designed to address these comments and make the definitions of functional entities consistent between the Functional Model and the NERC Glossary of Terms Used in Reliability Standards.	95	0	0	0	25	0	0	0	0	60	10	Getting core NERC documents straight is essential to all other ERO functions, standards development, compliance (auditing, investigating and enforcement), RAPA reports,...
27	Project 2010-04 Demand Data (29)	As envisioned, this project will result in two standards — with MOD-016 through MOD-020 in a single standard, and MOD-021 in a separate standard. The requirements need to be more specific to clearly identify the format, etc., for providing data.	82	0	7	0	50	0	25	0	0	0	0	Waiting on PC
28	Project 2010-03 Modeling Data (30)	Requires merging, upgrading and expanding existing requirements for entities to provide data used to model the bulk electric system.	75	0	0	0	50	0	25	0	0	0	0	Waiting on PC
29	Project 2009-05 Resource Adequacy Assessments (32)	Implements recommendations from the Resource and Transmission Adequacy Task Force (RTATF) Report and the Gas/Electricity Interdependency Task Force Report, approved by the NERC Board on June 15, 2004, related to resource adequacy.	72	0	22	0	50	0	0	0	0	0	0	
30	Project 2012-02 Physical Protection (31)	Consider the development of reliability standards for the physical protection of essential equipment, buildings and people located in power generation, transmission, or distribution system locations in order to mitigate the associated reliability risks to the bulk power system.	50	0	0	50	0	0	0	0	0	0	0	May be addressed in CIP
31	Project 2010-02 Connecting New Facilities to the Grid (34)	Ensure that all of the elements that should be addressed when a new facility is connected to the grid are included in the revised standard.	50	0	0	0	25	0	25	0	0	0	0	Still needed?
32	Project 2012-01 Equipment Monitoring and Diagnostic Devices (35)	Consider the development of reliability standards for the application of major equipment monitoring and diagnostic devices and procedures.	50	0	0	0	50	0	0	0	0	0	0	Uncertain if this is still needed - duplicates role of other projects?

**NERC Standards Committee
Project Prioritization Worksheet**

STANDARDS COMMITTEE Reliability Standard Project Prioritization				(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
				Click Here to Sort Projects by Priority			Click Here to Insert a Row		Cells with this color are blank and need a value entered.					
Priority Number	Project Number and Name	Short Description	Overall Priority Rating	Meet a time-constrained regulatory directive due in: (100) < 12 mo. (75) < 18 mo. (50) > 18 mo.	Address regulatory directives without a time-constraint (Directive Index for Project times two, with 0 to 50 range)	Fill an identified gap in reliability 100 = severe risk of "Big Three" 75 = moderate and widespread 50 = moderate risk or scope 25 = small risk 0 = none	Improves existing reliability standards: 100 = Significantly 75 = Moderately 50 = Incrementally 25 = Minimally 0 = none	Coordinate changes with another project: 50 = Immediately 40 = in 1 to 2 years 30 = in more than 2 years 0 = none needed	Scheduled for its 5 year review in: 50 = 1 year or less 25 = 1 to 2 years 15 = 2 to 3 years 0 = over 3 years	Address compliance issues (0 to 50)	Address failed interpretation or SDT inability to develop an interpretation 50 = major gap 25 = moderate 10 = admin 0 = none	Project Percent Complete per NERC @Task Software (0 to 100)	OTHER FACTOR (Explanation for the rating must be indicated in the column to the right) (0 to 100)	Explanation
33	Project 2010-10 FAC Order 729 (9) 213	Address directives in FERC Order 729 relative to FAC-012-1 and FAC-013-1: (1) must address the Planning Horizon to ensure continuity with the ATC-related MOD standards; (2) should not address the Operating Horizon, because the ATC-related MOD standards already address this area; (3) should not delegate oversight and responsibility for this standard to Regional Entities, but rather do so at the ERO level; (4) must not conflict with the ATC-related MOD standards; and (5) must include Violation Risk Factors ("VRF") and Violation Severity Levels ("VSL").	0	100	1	0	50	0	0	0	0	100	0	
34	Project 2010-11 TPL Table 1 Order (13) 201	Provide clarity to industry on TPL-002-0, Table 1 - footnote 'b', regarding the planned or controlled interruption of electric supply where a single contingency occurs on a transmission system.	0	100	1	0	50	50	0	0	0	100	0	
35	Project 2007-01 Underfrequency Load Shedding (14) 196	Requires upgrading and expanding existing requirements to ensure that UFLS programs are coordinated and meet both regional and continent-wide criteria to operate when and only when needed.	0	0	0	0	75	0	25	0	0	100	0	

Exhibit F

Updated RSDP with the correct link to the Final Project Prioritization Tool in footnote 3

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Reliability Standards Development Plan: 2011–2013

(Approved By: NERC Board of Trustees on March 10, 2011)

to ensure
the reliability of the
bulk power system

March 10, 2011

116-390 Village Blvd., Princeton, NJ 08540
609.452.8060 | 609.452.9550 fax
www.nerc.com

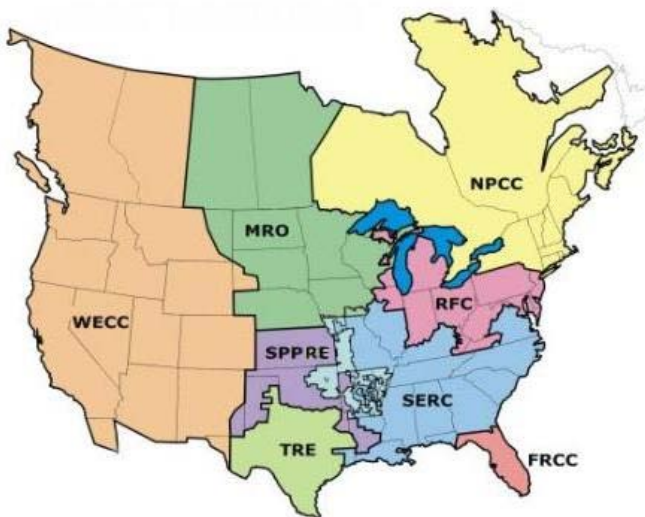
Acknowledgement

NERC would like to thank all the individuals who invest their time, energy, expertise, and resources in the development of NERC Reliability Standards and in the annual revision of this *Reliability Standards Development Plan*. The plan reflects comments and input from stakeholders, staff, the NERC technical community, and government agencies with oversight for North American electric reliability. Through collaboration and industry consensus, we expect to develop NERC Reliability Standards that are technically excellent, clear, enforceable, and ensure the reliability of the North American bulk power system.

NERC's Mission

The North American Electric Reliability Corporation (NERC) is an international regulatory authority established to evaluate reliability of the bulk power system in North America. NERC develops and enforces Reliability Standards; assesses adequacy annually via a 10-year forecast and winter and summer forecasts; monitors the bulk power system; and educates, trains, and certifies industry personnel. NERC is the electric reliability organization for North America, subject to oversight by the U.S. Federal Energy Regulatory Commission (FERC) and governmental authorities in Canada.¹

NERC assesses and reports on the reliability and adequacy of the North American bulk power system, which is divided into eight Regional areas, as shown on the map below and listed in Table A. The users, owners, and operators of the bulk power system within these areas account for virtually all the electricity supplied in the U.S., Canada, and a portion of Baja California Norte, México.



Note: The highlighted area between SPP and SERC denotes overlapping Regional area boundaries. For example, some load serving entities participate in one Region and their associated transmission owner/operators in another.

Table A: NERC Regional Entities

FRCC Florida Reliability Coordinating Council	SERC SERC Reliability Corporation
MRO Midwest Reliability Organization	SPP RE Southwest Power Pool Regional Entity
NPCC Northeast Power Coordinating Council	TRE Texas Reliability Entity
RFC ReliabilityFirst Corporation	WECC Western Electricity Coordinating Council

¹ As of June 18, 2007, the U.S. Federal Energy Regulatory Commission (FERC) granted NERC the legal authority to enforce Reliability Standards with all U.S. users, owners, and operators of the BPS, and made compliance with those standards mandatory and enforceable. In Canada, NERC presently has memorandums of understanding in place with provincial authorities in Ontario, New Brunswick, Nova Scotia, Québec, and Saskatchewan, and with the Canadian National Energy Board. NERC standards are mandatory and enforceable in Ontario and New Brunswick as a matter of provincial law. NERC has an agreement with Manitoba Hydro making reliability standards mandatory for that entity, and Manitoba has recently adopted legislation setting out a framework for standards to become mandatory for users, owners, and operators in the province. In addition, NERC has been designated as the “electric reliability organization” under Alberta’s Transportation Regulation, and certain reliability standards have been approved in that jurisdiction; others are pending. NERC and NPCC have been recognized as standards-setting bodies by the *Régie de l’énergie* of Québec, and Québec has the framework in place for reliability standards to become mandatory. Nova Scotia and British Columbia also have frameworks in place for reliability standards to become mandatory and enforceable. NERC is working with the other governmental authorities in Canada to achieve equivalent recognition.

Table of Contents

Acknowledgement	i
Summary	1
<i>Purpose</i>	1
<i>2011-2013 Projects</i>	2
<i>Changes to Plan</i>	4
Standards Development	6
<i>Standards Development Process</i>	7
Internal NERC Coordination Efforts	8
Coordination Efforts with NERC Technical Committees	9
Coordination with NAESB	9
<i>Transition to Results-based Standards</i>	10
Multi-faceted Results-based Training	11
Projects for Results-based Implementation	12
Regional Standards Development	16
Resource Documents	17

Summary

Purpose

The North American Electric Reliability Corporation (NERC) is committed to developing reliability standards that deliver an Adequate Level of Reliability for the North American bulk power system. The NERC *Reliability Standards Development Plan* is the foundation for reliability standards development efforts. The plan serves as the management tool and blue print that guides, prioritizes, and coordinates revision or retirement of existing reliability standards and the development of new reliability standards for the immediate 3-year time horizon.

NERC developed the initial 3-year plan in 2006 and has updated it annually since. In updating the plan, NERC seeks input on the need for (and prioritization of) new or revised reliability standards from the other program areas within NERC, as well as from NERC's technical committees and industry groups, and from those governmental authorities with responsibility for approving reliability standards in the United States and Canada. The objectives of the plan include, but are not limited to:

- Addressing the recommendations for new or revised reliability standards identified in the *U.S.-Canada Power System Outage Task Force Final Report on the August 14, 2003 Blackout in the United States and Canada: Causes and Recommendations*.
- Addressing directives identified in applicable Federal Energy Regulatory Commission (FERC) Orders.
- Addressing comments from industry stakeholders and others suggesting improvements to each reliability standard, including those comments received from industry stakeholders during public comment periods.
- Addressing quality issues to ensure each reliability standard has a clear statement of purpose, and has results-based requirements that are clear and measurable.
- Ensuring measures and compliance elements are aligned to support the requirements within the reliability standards and follow definitions outlined in the reliability standards template.
- Incorporating feedback from other NERC program areas such as Compliance Operations, Operations and Engineering, Reliability Assessments, and Event Analysis.
- Satisfying the requirement in Section 300 of the Rules of Procedure of the North American Electric Reliability Corporation for a five-year review of all reliability standards.

Developing technically excellent reliability standards is a long-term effort. This plan supports the effort in a dynamic fashion that can be continuously adapted to circumstances and changing priorities. The plan is reviewed and maintained by the NERC Standards Committee and Standards staff, and is updated on an annual basis (or more frequently if necessary).

On July 6, 2010 FERC held a Commissioner-led Technical Conference to address industry perspectives on issues pertaining to the development and enforcement of mandatory Reliability Standards for the bulk power system. The conference focused on the Electric Reliability

Organization’s (ERO) standards development process; communication and interactions between the Commission, the ERO and Regional Entities; and ERO and Regional Entity monitoring and enforcement. Conference participants uniformly and strongly supported the standard-setting approach of the ERO model outlined in Section 215 of the Federal Power Act. The ERO model draws on the unmatched technical expertise of many hundreds of industry subject matter experts to develop standards that best serve the reliability of the bulk power system in North America. This expertise includes that of other stakeholders such as large and small customers and governmental authorities with expertise on the “receiving” end of reliability (i.e., those who depend upon and pay for reliability).

The need to establish priorities for NERC’s standards development projects was a recurring theme during the technical conference. This *Reliability Standards Development Plan: 2011-2013* advances a concept for prioritization of standards development projects with the expectation that NERC staff will continue to coordinate with the NERC Standards Committee, applicable regulatory authorities, and industry participants in further advancing the prioritization process.

2011-2013 Projects

This revised *Reliability Standards Development Plan: 2011-2013* identifies a total of 35 continent-wide standards development projects either active or planned as of March 1, 2011. These projects have been categorized in Table 1 as “High Priority Projects,” “Projects Continuing and Expected to be Completed Shortly,” and “Additional Projects to be Initiated in Order of Priority².” As each of the projects in the first two groups move to final balloting stage and receive Board and regulatory approval, this will free up staff and industry resources that can then be assigned to the “Additional Projects to be Initiated in Order of Priority.”

These priorities were in part determined based on risks and policy issues quantified through a new prioritization tool created by the Standards Committee and endorsed by the Standards Oversight and Technology Committee of the NERC Board of Directors in February 2011. This first generation prioritization tool assists the Standards Committee in examining the prioritization of each reliability standard or reliability issue needing attention each year. As NERC and the Standards Committee gain experience in use of the tool, we will work to improve and enhance the tool over time³.

² Phase 1 of Project 2010-13 was not included in the prioritization process as it is near completion; Phase 2 was included and ranked as number 18. Project 2010-15 was not included in the prioritization, as it is an "urgent action" project and expected to complete shortly. Project 2010-16 was inadvertently excluded from the prioritization process, and will be considered in the next review of project priorities.

³ [Reliability Standards Project Prioritization Tool - Link](#)

Table 1

High Priority Projects	
1	Project 2008-06 Cyber Security - Order 706
2	Project 2007-17 Protection System Maintenance & Testing
3	Project 2007-06 System Protection Coordination
4	Project 2010-07 Generator Requirements at the Transmission Interface
5	Project 2007-12 Frequency Response
6	Project 2007-02 Operating Personnel Communications Protocols
7	Project 2006-02 Assess Transmission and Future Needs
8	Project 2010-17 Definition of Bulk Electric System
9	Project 2007-03 Real-time Transmission Operations
10	Project 2007-09 Generator Verification
11	Project 2009-01 Disturbance and Sabotage Reporting
12	Project 2010-05 Protection Systems

Projects Continuing and Expected to Complete Shortly	
13	Project 2006-06 Reliability Coordination
15	Project 2007-07 Vegetation Management
-	Project 2010-13 Relay Loadability Order Phase 1
-	Project 2010-15 Remote Access Urgent Action

Additional Projects to be Initiated in Order of Priority	
14	Project 2010-14 Balancing Authority Reliability-based Control
16	Project 2007-11 Disturbance Monitoring
17	Project 2008-01 Voltage and Reactive Planning and Control
18	Project 2010-13 Relay Loadability Order Phase 2
19	Project 2009-02 Real-time Reliability Monitoring and Analysis Capabilities
20	Project 2009-03 Emergency Operations
21	Project 2008-12 Coordinate Interchange Standards
22	Project 2010-01 Support Personnel Training
23	Project 2009-04 Phasor Measurements
24	Project 2008-02 Undervoltage Load Shedding
25	Project 2009-07 Reliability of Protection Systems
26	Project 2010-08 Functional Model Glossary Revisions
27	Project 2010-04 Demand Data
28	Project 2010-03 Modeling Data

29	Project 2009-05 Resource Adequacy Assessments
30	Project 2012-02 Physical Protection
31	Project 2010-02 Connecting New Facilities to the Grid
32	Project 2012-01 Equipment Monitoring and Diagnostic Devices
-	Project 2010-16 Definition of System Operator

Changes to Plan

The number of projects proposed in this plan (35) is less than the 37 projects listed in the 2010-2012 version of the plan. The composition of these projects has changed significantly since approval of the 2010-2012 plan:

- The following five projects not identified in the 2010-2012 plan were initiated and completed since last year's plan was approved:
 - Project 2009-08 Nuclear Plant Interface Coordination
 - Project 2010-09 NUC Implementation Plans for CIP Version 2 and Version 3Standards
 - Project 2010-10 FAC Order 729
 - Project 2010-11 TPL Table 1 Order
 - Project 2010-12 Order 693 Directives
- The following six projects identified in the 2010-2012 plan were completed and removed from this revised plan:
 - Project 2006-04 Backup Facilities
 - Project 2006-08 Transmission Loading Relief
 - Project 2007-01 Underfrequency Load Shedding
 - Project 2007-04 Certifying System Operators
 - Project 2009-06 Facility Ratings
 - Project 2009-18 Withdraw Three Midwest ISO Waivers
- Project 2010-06 Results-based Reliability Standards identified in the 2010-2012 plan was transitioned into an initiative, subsequently completed (more below), and removed from this revised plan.
- Project 2007-05 Balancing Authority Controls and Project 2007-18 Reliability-based Control were merged into Project 2010-14 Balancing Authority Reliability-based Control, which is an addition to this plan.
- The following five projects initiated in 2010 were not anticipated when the 2010-2012 plan was drafted and are additions to this plan:

- Project 2010-08 Functional Model Glossary Revisions
- Project 2010-13 Relay Loadability Order Phase 1 and 2
- Project 2010-15 Remote Access Urgent Action
- Project 2010-16 Definition of System Operator
- Project 2010-17 Definition of Bulk Electric System

It should be noted that this *Reliability Standards Development Plan: 2011-2013*, identifies the standards development projects that are currently expected to be worked on in the immediate three-year time horizon. Every attempt will be made to bring as many projects to completion as possible; however, not all of the projects identified in this plan will be completed in the immediate three-year time horizon.

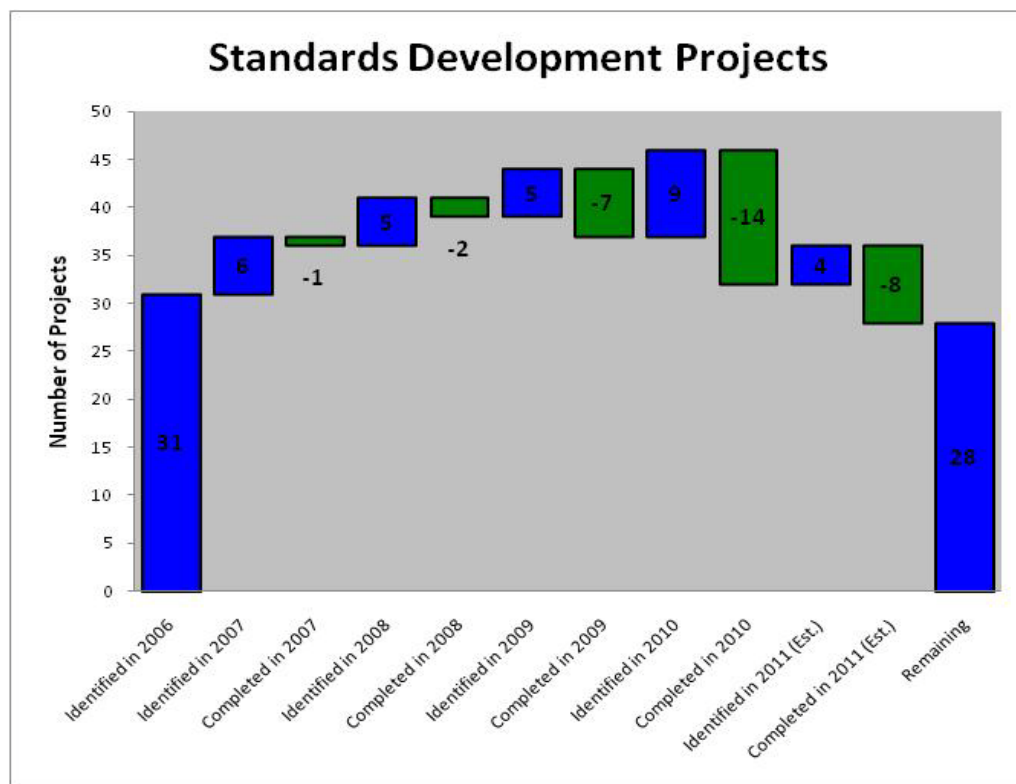
Standards Development

NERC's standards program develops and maintains standards designed to ensure the reliability of the bulk power system in North America. The set of NERC reliability standards defines the reliability requirements for planning and operating the North American bulk power system. NERC staff facilitates standards drafting team activities; assists the drafting teams in adherence to the integrity of the development process, and ensures that the quality of documents produced meet the criteria for approval.

Each standard must be technically excellent, timely, just, reasonable, not unduly discriminatory or preferential, in the public interest, and consistent with other applicable standards or regulations to be approved by the US and Canadian regulatory authorities. A link to the document describing the quality attributes of an excellent reliability standard is provided [here](#).

NERC continues to make progress in improving the quality of the set of NERC reliability standards. Since the establishment of this plan in 2006 through August 1, 2010 NERC has identified 59 standards development projects, the vast majority of which involve the revision of multiple standards. Of those, 19 projects have been completed.

The following chart summarizes the number of newly identified projects in each revision of the Reliability Standards Development Plan as well as the number of projects completed between revisions to the plan from 2006 through 2010 along with an estimate for 2011:



Short summaries of all the currently opened or planned standards development projects as of March 1, 2011 are provided [here](#). The summaries contain the project name, project number, a short description of the project, and the standards associated with the project.

More expansive overviews of each of the currently opened or planned reliability standards development projects as of March 1, 2011 are provided [here](#). Each project overview includes the project number, title, list of affected reliability standards, and hyperlinks to associated portions of the NERC standards web pages along with a brief description of the project. In prior plans, these overviews also included a list of “Issues to be Considered by the Standard Drafting Team” which was populated with information contained in the “NERC Standards Issues Database (Issues Database).” The Issues Database is used by the NERC standards program staff to track the issues and concerns identified with a particular standard, including a complete list of applicable regulatory directives.

Standards Development Process

NERC uses a formal process for refining, developing, and approving reliability standards that has received national, formal accreditation from the American National Standards Institute (ANSI) and approval by the Federal Energy Regulatory Commission (FERC) in the United States. A key element of this plan is to review and upgrade all the existing standards based on the directives in the FERC’s final rules on standards, previous industry comments, and actual experience gathered from using the standards.

The [*Standard Processes Manual*](#) provides a consensus-building process to confirm the need for a proposed new or revised standard, and then for developing and approving a new or revised standard. This standards development process, or its successor, will serve as the mechanism for achieving the improvements detailed in this plan. The standards development process includes active involvement of industry experts and stakeholders tasked with developing excellent standards.

The *Standard Processes Manual* is incorporated in Section 300 of the ERO [Rules of Procedure](#) as Appendix A. In its June 2006 ERO Certification Order, the Commission found that NERC’s proposed rules provide for reasonable notice and opportunity for public comment, due process, openness, and a balance of interests in developing reliability standards. The development process is open to any person or entity with a legitimate interest in the reliability of the bulk power system. NERC considers the comments of all stakeholders, and a vote of stakeholders is required to approve a reliability standard before it is submitted for NERC Board action and regulatory approval.

The *Standard Processes Manual* was approved by FERC on September 3, 2010. The following is a summary of the improvements in the *Standard Processes Manual* compared to the predecessor *Reliability Standards Development Procedure*.

- (1) Improved control on timing for initiation of new projects by giving the Standards Committee the authority to prioritize standards development activity so that some projects may be deferred to focus on higher priority projects, to require technical justification and documentation when a standard request is submitted, and to evaluate

- unplanned project proposals to assign an appropriate priority relative to planned project activities.
- (2) More efficient processing of new project requests by allowing informal comment periods for project proposals where the need to modify or develop the identified standard(s) has already been established.
 - (3) More extensive use of “informal” stakeholder feedback by allowing drafting teams to use a variety of means to collect feedback in the early stages of standards development.
 - (4) Enhanced technical writing support during the drafting of standards to make better use of subject matter experts.
 - (5) Ensuring a standard meets specific “quality” attributes by adding a step to the process for a formal “quality review” before the final draft of a standard is posted for formal stakeholder review.
 - (6) Concurrent formal commenting and balloting to involve more participants in determining the final wording of a standard.
 - (7) New process to expedite development of a new or revised standard where specific time constraints are associated with its completion.
 - (8) Improved clarity in the description of the processes for developing definitions; conducting field tests and collecting and analyzing data; interpretations; appeals; variances; standards developed to address confidential issues; and process for approving supporting references.

Internal NERC Coordination Efforts

NERC has developed specific initiatives related to compliance monitoring and enforcement, reliability assessment and performance analysis, and event analysis to identify possible “high impact” reliability standard development projects that may have significant impact on the reliability of the bulk power system. For example, lessons learned and trends identified from system events tracked for the last three years that have been causal or contributory to the severity of system disturbances are helping NERC focus efforts and provide the technical foundation for standards development and modification efforts on issues that are most critical to bulk power system reliability. NERC has developed a broad-based reliability initiative that addresses issues in the area of system protection and control which is the basis for Project 2010-05 Protection Systems and a number of other ongoing standards development projects in the area of system protection and control. This initiative identified a compendium of system protection and control issues that have contributed to many system events. This ongoing collaborative effort between the Event Analysis program and Standards development will continue to be used to identify specific changes to reliability standards to ensure the reliability of the North American bulk power system.

In addition, the document [Risk-Informed Approach for Prioritizing Development of Standards](#) outlines one of the internal initiatives supported by reliability assessment and performance analysis that takes the form of a risk-informed approach for prioritizing new and enhancing existing reliability standards leading to the greatest improvement in reliability. Trend assessment

from event, condition and regulatory driven measures can provide additional risk-informed prioritization to standard development as bulk power system performance can provide insights into potential gaps and areas for standard improvements. These trends will be weighed against other NERC standard development initiatives during the prioritization process used in the development of this plan.

Coordination Efforts with NERC Technical Committees

NERC's technical committees, subcommittees, working groups, and task forces provide technical research and analysis used to justify the development of new standards and provide guidance, when requested by the Standards Committee, in overseeing field tests or collection and analysis of data. The technical committees, subcommittees, working groups, and task forces provide feedback to drafting teams during both informal and formal comment periods.

The technical committees, subcommittees, working groups, and task forces share their observations regarding the need for new or modified standards or requirements with the standards staff for use in identifying the need for new standards projects for the three-year *Reliability Standards Development Plan*.

Coordination with NAESB

In addition, NERC also coordinates its reliability standards development activities with the business practices developed by the [North American Energy Standards Board](#) (NAESB). Many of the existing NERC standards are related to business practices, although their primary purpose is to support reliability. Reliability standards, business practices, and commercial interests are inextricably linked. An example of an existing standard that is both a reliability standard and a business practice is the Transmission Loading Relief (TLR) Procedure currently used as an interconnection-wide congestion management method in the Eastern Interconnection.

NERC has taken several steps to ensure its reliability standards do not have any undue adverse impact on business practices or competition. NERC and NAESB follow the [NERC NAESB Template Procedure for Joint Standards Development and Coordination](#) and the associated [supplement](#) in areas that have both reliability and business practice elements. This procedure is being implemented for all standards in which the reliability and business practice elements are closely related, thereby making joint development a more efficient approach. In addition to this formal process, drafting teams work with NAESB groups to ensure effective coordination of wholesale electric business practice standards and reliability standards.

To ensure each reliability standard does not have an undue adverse effect on competition, NERC requires that each standard meet the following criteria:

- Competition — A reliability standard shall not give any market participant an unfair competitive advantage.
- Market Structures — A reliability standard shall neither mandate nor prohibit any specific market structure.
- Market Solutions — A reliability standard shall not preclude market solutions to achieve compliance with that standard.

- Commercially Sensitive Information — A reliability standard shall not require the public disclosure of commercially sensitive information. All market participants shall have equal opportunity to access commercially non-sensitive information that is required for compliance with reliability standards.

Transition to Results-based Standards

To improve the overall quality of its Reliability Standards, NERC has introduced “results-based” principles into the standards development process. These principles require the standard drafting teams to achieve a portfolio of performance, risk, and competency-based requirements within the set of NERC reliability standards that support an effective defense-in-depth strategy for ensuring the reliability of the bulk power system. This concept enhances development of an integrated set of standards that build on the core entity competencies verified during NERC’s entity certification processes.

The term “results-based” is sometimes confused with the term “performance-based” when combined with the terms “standards” and “requirements”. Performance-based standards can have the connotation of measuring only ultimate performance – no oil spills, no mine disasters, no plane crashes, etc. The problem with a purely performance-based approach is that if the system fails, the consequences are unacceptable. NERC is not implementing performance-based standards that focus only on ultimate outcomes for the main body of its standards. NERC is implementing a portfolio of result-based requirements, each of which identifies a clear and measurable expected outcome, such as: a) a stated level of reliability performance, b) a reduction in a specified reliability risk, or c) a necessary competency. The set of NERC’s reliability standards works collectively in support of NERC’s reliability principles to prevent instability, uncontrolled separation and cascading. To achieve any one of NERC’s reliability principles a ‘defense in depth’ strategy is being employed such that there is a network of requirements spanning several standards that involve a mix of performance-based, risk-based, and competency-based requirements that in combination achieve NERC’s reliability principles.

For the bulk power system, only a small percentage of NERC’s requirements will be performance-based. Performance-based requirements are useful in situations where tracking and managing the “results” are the only way to manage, incentivize and correct outcomes. Control performance (BAL-001- Real Power Balancing Control Performance) is a good example of a standard that contains performance-based requirements. The goal of the standard is to maintain frequency within defined limits by balancing real power demand and supply in real-time, and the requirements identify specific actions of a Balancing Authority must take to achieve that goal. Following these requirements alone will not result in the goal of maintaining frequency within defined limits – this standard is supported by the Balancing Authority certification process where NERC verifies that prospective Balancing Authorities have the processes, procedures and tools needed to monitor and act to meet the requirements in BAL-001, as well as many other standards.

A majority of NERC’s requirements are, and will continue to be risk-based, or preventative requirements that if followed, reduce the risk of instability, uncontrolled separation, and cascading failures. The performance-based requirements in the BAL-001 standard are supported

by several risk-based standards such as EOP-001 – Emergency Operations Planning. EOP-001 requires the Balancing Authority to have action plans for mitigating various energy emergencies.

Another portion of NERC’s standards are ‘competency-based’, meaning they are requirements to have things such as tools, training, communications, and backup facilities. The performance-based requirements in the BAL-001 standard are supported by capability-based requirements in standards such as PER-003 Operating Personnel Credentials, where the Balancing Authority is required to staff its real-time operating positions with only certified system operators.

Results-based standards should not be associated with lax rules for industry. NERC is developing a strong portfolio of interdependent and overlapping requirements that work with the entity certification processes and address performance, risk mitigation, and competency. NERC is applying a defense in depth strategy that has proven successful in managing risks in many other industries including nuclear, aerospace, and other critical sectors.

A number of factors were considered when developing the plan for transitioning the current set of NERC Reliability Standards to results-based, including both the priority of projects as established by the Standards Committee as well as the then current status of each individual project. The goal of the plan is to smoothly transition existing standards to results-based standards while respecting and considering the amount of work existing standard drafting teams have expended in their respective projects to date relative to the planned completion date of the project. For example, to a large degree projects that are expected to be completed by year-end 2010 were not good candidates for transition to results-based because doing so would require each affected drafting team to redraft work which is essentially complete and ready for industry ballot, thereby extending the project by as much as six months. Consequently, projects which were in the very early stages of development or which have not been initiated were identified as early candidates for results-based implementation.

Drafting team training for teams working on results-based standards has been enhanced to include results-based concepts and will assist in building on this foundation for the transition to a complete set of results-based reliability standards.

Multi-faceted Results-based Training

NERC has developed and implemented training in the results-based concepts to help stakeholders as well as drafting teams.

To commence the rollout to the industry of the results-based initiative, NERC staff provided a one-time training Webinar in the fall of 2010 for all stakeholders on the concepts of results-based reliability standards, highlighting what stakeholders should look for when commenting and voting upon these new standards. NERC also conducted a “Train the Trainer” session in 2010 to provide drafting team coordinators with the tools needed to apply the results-based approach to the development of standards.

The NERC coordinator assigned to a drafting team will be responsible for training his or her drafting teams in the results-based concepts. The core program provides a structure for developing standards starting with explicitly identifying the “Need”, “Goals”, and “Objectives”

of the particular standard under development. Since the majority of active standards development projects are beyond the “Need”, “Goals”, and “Objectives” phase of the process, portions of the program are not directly applicable to projects already under development but were summarized in the fall Webinar training. The fall Webinar training provided the existing drafting teams with the knowledge of the results-based principles that they can then apply to their respective projects on a prospective basis.

The following projects will reach completion without fully implementing the results-based concepts and format, since the full implementation of results-based principles would be too disruptive to the timely completion in these projects. However, the drafting teams associated with these projects are expected to incorporate results-based concepts if the opportunity arises in the course of the project (for example, between the last formal comment period and ballot or between ballots as permitted by the Standards Committee).

- Project 2006-02 Assess Transmission and Future Needs
- Project 2006-06 Reliability Coordination
- Project 2007-02 Operating Personnel Communications Protocols
- Project 2007-03 Real-time Transmission Operations
- Project 2007-09 Generator Verification
- Project 2007-11 Disturbance Monitoring
- Project 2007-12 Frequency Response
- Project 2007-17 Protection System Maintenance & Testing
- Project 2008-06 Cyber Security - Order 706

The standards associated with these projects, along with any other standards currently not associated with any project, will be updated to include the results-based principles the next time the standards are opened for review or revision.

Projects for Results-based Implementation

The following projects will fully implement the results-based concepts. Leadership and training for this initiative is the responsibility of the NERC Coordinator for each specific project.

- Project 2007-06 System Protection Coordination
- Project 2007-07 Vegetation Management
- Project 2008-01 Voltage and Reactive Planning and Control
- Project 2008-02 Undervoltage Load Shedding
- Project 2008-12 Coordinate Interchange Standards
- Project 2009-01 Disturbance and Sabotage Reporting
- Project 2009-02 Real-time Reliability Monitoring and Analysis Capabilities
- Project 2009-03 Emergency Operations
- Project 2009-04 Phasor Measurements
- Project 2009-05 Resource Adequacy Assessments
- Project 2009-07 Reliability of Protection Systems
- Project 2010-01 Support Personnel Training
- Project 2010-02 Connecting New Facilities to the Grid

- Project 2010-03 Modeling Data
- Project 2010-04 Demand Data
- Project 2010-05 Protection Systems
- Project 2010-07 Transmission Requirements at the Generator Interface
- Project 2010-08 Functional Model Glossary Revisions
- Project 2010-13 Relay Loadability Order
- Project 2010-14 Balancing Authority Reliability-based Control
- Project 2012-01 Equipment Monitoring and Diagnostic Devices
- Project 2012-02 Physical Protection

All future projects not identified in this plan will be required to be developed following the results-based principles and formats. It will be the responsibility of the NERC Standards Committee to ensure that this plan is implemented accordingly.

The complete [Results-based Reliability Standards Transition Plan](#) is posted on the Standards portion of the [NERC Website](#).

Standards Project Prioritization

This *Reliability Standards Development Plan: 2011-2013* is designed with the recognition that there are limited available staff and industry resources to complete the projects immediately and concurrently. NERC staff continually coordinates with the Standards Committee in establishing the number and types of projects to devote resources to at any point in time based on the limited resources that are available. Every effort will be made to bring as many of the standards projects identified in this *Reliability Standards Development Plan: 2011-2013* to completion over the immediate three-year time horizon.

As of March 1, 2011 NERC had 34 separate active or planned standards development projects - a number greater than NERC and stakeholders can address concurrently. Further, NERC, stakeholders and regulatory authorities are coming to the recognition that certain standards projects need to be completed on a priority basis – implying that other projects may need to be deferred until resources become available.

The need to establish priorities for NERC's standards development projects was a recurrent topic of discussion during the technical conference held by FERC on July 6, 2010. Since the July 6 technical conference the Standards Committee has been developing a process for establishing the priority of standards development projects. On February 17, 2011 such a process was proposed to, and endorsed by, the NERC Board of Trustees. The Standards Committee process for project prioritization is summarized in Attachment 1 to this Reliability Standards Development Plan.

The Standards Committee project prioritization process is a method for identifying, prioritizing, and monitoring NERC standards development projects, taking into account the various drivers for project initiation and the industry's resource constraints. The process provides the flexibility to accommodate new projects and to adjust project priorities and completion schedules in response to changing conditions.

The Standards Committee developed a “project prioritization tool” to guide Standards Committee decisions on the development priority of each project within the three-year Reliability Standards Development Plan. The tool calculates a ranking for a project based on ten separate criteria, including whether a specific project includes a new or revised standard that:

- Is needed to fill an identified gap in reliability,
- Will improve BPS reliability by a certain perceived level,
- Addresses a regulatory directive,
- Is needed to coordinate with another standard development project,
- Is approaching its five year review requirement, and
- Addresses compliance related issues.

The Standards Committee used the results provided by the tool to develop the standards development project prioritization list shown below. These projects have been categorized in Table 2 as “High Priority Projects,” “Projects Continuing and Expected to Complete Shortly,” and “Additional Projects to be Initiated in Order of Priority.”⁴ As each of the projects in the first two groups achieve a successful ballot and are adopted by the Board of Trustees, the Standards Committee will select one of the projects on the “Additional Projects to be Initiated in Order of Priority” list and initiate active development of the project as a new “High Priority Project.”

Table 2

High Priority Projects	
1	Project 2008-06 Cyber Security - Order 706
2	Project 2007-17 Protection System Maintenance & Testing
3	Project 2007-06 System Protection Coordination
4	Project 2010-07 Generator Requirements at the Transmission Interface
5	Project 2007-12 Frequency Response
6	Project 2007-02 Operating Personnel Communications Protocols
7	Project 2006-02 Assess Transmission and Future Needs
8	Project 2010-17 Definition of Bulk Electric System
9	Project 2007-03 Real-time Transmission Operations
10	Project 2007-09 Generator Verification
11	Project 2009-01 Disturbance and Sabotage Reporting
12	Project 2010-05 Protection Systems

Projects Continuing and Expected to Complete Shortly

⁴ Phase 1 of Project 2010-13 was not included in the prioritization process as it is near completion; Phase 2 was included and ranked as number 18. Project 2010-15 was not included in the prioritization, as it is an "urgent action" project and expected to complete shortly. Project 2010-16 was inadvertently excluded from the prioritization process, and will be considered in the next review of project priorities.

13	Project 2006-06 Reliability Coordination
15	Project 2007-07 Vegetation Management
-	Project 2010-13 Relay Loadability Order Phase 1
-	Project 2010-15 Remote Access Urgent Action

Additional Projects to be Initiated in Order of Priority	
14	Project 2010-14 Balancing Authority Reliability-based Control
16	Project 2007-11 Disturbance Monitoring
17	Project 2008-01 Voltage and Reactive Planning and Control
18	Project 2010-13 Relay Loadability Order Phase 2
19	Project 2009-02 Real-time Reliability Monitoring and Analysis Capabilities
20	Project 2009-03 Emergency Operations
21	Project 2008-12 Coordinate Interchange Standards
22	Project 2010-01 Support Personnel Training
23	Project 2009-04 Phasor Measurements
24	Project 2008-02 Undervoltage Load Shedding
25	Project 2009-07 Reliability of Protection Systems
26	Project 2010-08 Functional Model Glossary Revisions
27	Project 2010-04 Demand Data
28	Project 2010-03 Modeling Data
29	Project 2009-05 Resource Adequacy Assessments
30	Project 2012-02 Physical Protection
31	Project 2010-02 Connecting New Facilities to the Grid
32	Project 2012-01 Equipment Monitoring and Diagnostic Devices
-	Project 2010-16 Definition of System Operator

Regional Standards Development

NERC's Rules of Procedure Section 300 allows for a regional entity to develop regional reliability standards. A regional entity developing regional reliability standards must adhere to a NERC-approved regional reliability standards development procedure when developing its regional reliability standards. Each regional entity's regional standards development procedure is documented in Exhibit C of its regional delegation agreement with NERC.

No regional reliability standard shall be effective within a region unless approved and filed by NERC with the Commission and the applicable authorities in Canada and Mexico and approved by such regulatory authorities. Regional reliability standards, when approved by FERC and the applicable authorities in Canada and Mexico, shall be made part of the body of NERC reliability standards and shall be enforced upon all applicable bulk-power system owners, operators, and users within the applicable regional entity's region, regardless of membership in the region.

Regional reliability standards provide for as much uniformity as possible with reliability standards across the interconnected bulk power system of the North American continent. A regional reliability standard shall be:

- more stringent than a continent-wide reliability standard, including regional standards that address matters that continent-wide reliability standards do not; or
- necessitated by a physical difference in the bulk power system.

With the exception of regional standards developed in support of continent-wide standards, regional entities may independently initiate regional standards development and forward such standards to NERC for review and approval.

Regional entity standards are anticipated to be developed by the individual regions over the next three years. The [Regional Reliability Standards Development Projects](#) document provides an overview of each of the planned regional standards development projects for the immediate three year period.

Resource Documents

Links to the following resource documents are provided here for convenience. These documents provide a portion of the historical perspective on the development of reliability standards since the inception of the ERO.

- [FERC NOPR on Reliability Standards, October 20, 2006.](#)
- [FERC Staff Preliminary Assessment of Proposed Reliability Standards, May 11, 2006.](#)
- [FERC Order No. 693 Mandatory Reliability Standards for the Bulk Power System, March 16, 2007.](#)
- [FERC Order No. 693-A Mandatory Reliability Standards for the Bulk Power System, July 19, 2007.](#)
- [FERC Order No. 890 Preventing Undue Discrimination and Preference in Transmission Service, February 16, 2007.](#)
- [Comments of the North American Electric Reliability Council and North American Electric Reliability Corporation on Staff Preliminary Assessment of Reliability Standards, June 26, 2006.](#)
- [Comments of the North American Electric Reliability Corporation on Staff Preliminary Assessment of NERC Standards CIP-002 through CIP-009, February 12, 2007.](#)
- [Comments of the North American Electric Reliability Corporation on the Notice of Proposed Rulemaking for Facilities Design, Connections and Maintenance Reliability standards, September 19, 2007.](#)
- [Comments received during the development of Version 0 reliability standards.](#)
- [Consideration of comments of the Missing Compliance Elements drafting team.](#)
- [Consideration of comments of the Violation Risk Factors drafting team.](#)
- [Consideration of comments in the Phase III–IV standards.](#)
- [Q&A for Standards and Compliance.](#)

Attachment 1

Standards Committee Process for Standards Project Identification, Prioritization, and Monitoring

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Standards Committee Process for Standards Project Identification, Prioritization, and Monitoring

February 2011

to ensure
the reliability of the
bulk power system

Table of Contents

<i>Objective</i>	21
<i>Background</i>	21
1. Identifying the List of Standards Projects	21
2. Listing and Prioritizing Baseline Projects	22
3. Developing the Project Cut-off Line Based on Resource Constraints	23
4. Adding New Projects and Adjusting Project Priority	23
5. Developing Projects Schedules	24
6. Monitoring Projects	24
7. Project Identification, Prioritization and Management Flow Diagram	25
8. Project Prioritization Tool Description	25
<i>Rows</i>	25
<i>Columns</i>	25
Figure 1	29
Attachment A	30

Objective

This document presents a Standards Committee process for identifying, prioritizing, and monitoring NERC standards development projects, taking into account the various drivers for project initiation and the industry's resource constraints. The process provides the flexibility to accommodate new projects and to adjust project priorities and completion schedules in response to changing conditions.

Background

Since the startup of the ERO, the number of standards development projects has grown significantly. Coupled with the increasing number of requests for interpretations and directives issued by regulatory authorities, the industry has experienced a rapid and sustained increase in standards development related workload. The standards development process allows for any individual to propose a new project or request an interpretation. While the Standards Committee can exercise its discretion to delay the start of any project to cope with increased workload and to better manage standard projects to achieve timely completion, additional flexibility beyond just withholding the start of a project is needed.

At its April 2010 meeting, the NERC Standards Committee endorsed a proposal to develop a structured process to assist in managing standards development projects from the project planning stage through submission of a completed standard to the NERC Board of Trustees. The process outlined in this document takes into account industry resource constraints and changing conditions as new projects emerge and as issues are encountered during the course of standard development.

1. Identifying the List of Standards Projects

In general, standards projects may be initiated for a variety of reasons, including:

- a. **Periodic Review** — To meet the five-year standard revision cycle requirement
- b. **Reliability Need** — Industry participants, NERC staff or the Board of Trustees identify the need for a new standard or revision to an existing standard to meet a reliability need or fill a reliability gap
- c. **Clarity, Quality and Coordination**— Industry participants, NERC and Regional Entity staff identify quality and clarity gaps in NERC's existing reliability standards that need to be remedied to ensure consistent industry compliance. Regional Entities and stakeholders may propose continent-wide NERC standards that will avoid the need to develop regional standards which will be phased out when the NERC standards are put in place
- d. **Interpretations** — Industry participants submit formal requests for interpretation that may identify a gap or deficiency in an existing standard

Standards Committee Process for Standards Project Identification, Prioritization, and Monitoring

- e. **Regulatory Directives** — FERC or Canadian regulatory authorities may direct the ERO to make changes to standards, to incorporate suggested improvements, address deficiencies in existing NERC standards, or respond to new energy policies.

Plans for developing standards to take care of the periodic review requirement (Driver (a), above) can be developed with some degree of accuracy. However, the scope and complexity of project plans for standards initiated in response to the other four drivers are much harder to predict. It is therefore very difficult to develop a standards development work plan that accounts for all new projects to be initiated in a future year with any degree of accuracy. However, for planning purposes, a baseline list of projects can be developed for a future year based on:

- a. Current projects expected to continue into the next year
- b. New projects to address the five-year periodic review requirement expected within the next year.

As a first pass, a baseline list of standard projects can be developed and prioritized without regard to resource constraints. A cutoff line will then apply to the baseline list using the resource constraint assumptions presented in Section 3, below.

2. Listing and Prioritizing Baseline Projects

Some standard projects need to be placed at a higher priority than the others due to the urgency or significance of the associated drivers for development or revision. For example, revising a standard to fill a reliability gap should normally have a higher priority than revising a standard to improve quality or clarity. Similarly, removing ambiguity (which itself may be a form of reliability gap) from a standard that has a large number of violations would normally have a higher priority than combining two or more standards to remove overlaps and consolidate similar or related requirements.

However, the rationale presented in the above two examples only represents a general principle, which cannot be applied objectively to develop a standard project priority list that balances all interests, unless a systematic approach is developed to provide a balanced weighting of each of the development drivers outlined above. The Standards Committee, in trying to prioritize projects in the Standards Development Work Plan for 2011-2013, adopted the concept of using a project prioritization tool to develop standard project priorities for the coming year. (See Attachment A)

The use of a “*prioritization tool*” is essential to ensuring all the drivers for new projects are fully considered in the allocation of NERC and industry resources between each of the projects in NERC’s Reliability Standards Development Plan. With prior inputs from all concerned parties on the prioritization criteria and associated weighting of these criteria, the tool will establish a relative priority score for each project, irrespective of who and why the project is proposed. This is particularly important to avoid arbitrary or highly subjective decisions on which projects should be placed at a higher priority than the others.

Standards Committee Process for Standards Project Identification, Prioritization, and Monitoring

Ultimately the prioritization tool described below is just that – a tool to guide informed decision making by the NERC Standards Committee and the NERC Board of Trustees on the relative priority of proposed and ongoing standards development projects.

3. Developing the Project Cut-off Line Based on Resource Constraints

The baseline project list represents a snapshot of the projects that the Standards Committee needs to manage in the current year. Recognizing that the resources needed at NERC and in the industry for standards development are not unlimited, the Standards Committee must determine which ongoing projects should be directed to continue development work to ensure timely completion, which new projects must be initiated to address NERC reliability objectives and meet regulatory deadlines, and when necessary, which standard development projects should be placed on hold until additional NERC and industry resources become available.

NERC has a finite annual budget and the industry has finite resources; together these factors limit the number of standards development projects that can be worked on concurrently. While an increase in NERC staff resources may address certain development bottlenecks, there is no clear indication or assurance that a corresponding increase in industry resources to participate in the drafting, reviewing, commenting and balloting the standards is forthcoming. The Standards Committee must consider these resource constraints when planning for the number of projects that can be effectively managed in any given time period.

There are no fixed rules or formulas with which to estimate staff and industry resource requirements or constraints for standards development. For a baseline estimate, past experience is the best source of information. Recent Standards Committee and NERC staff experience generally supports the conclusion that NERC and the industry can manage the development of no more than ten to twelve standards projects under active development at any one time. This judgment of course depends on the complexity of these projects and considerations as to whether projects draw upon the same subject matter expert (“SME”) resource pool during the same period. Nonetheless, our informed judgment is that attempts to develop more than ten or twelve projects during the same period will result in an actual loss of throughput and/or a reduction in standards quality.

4. Adding New Projects and Adjusting Project Priority

The baseline list does not factor in new projects that may emerge during a given project development year due to the other four drivers (b) through (e) in Section A. This uncertainty is particularly difficult to address with respect to regulatory directives. When new projects emerge and are evaluated, the Prioritization Tool is designed to score each new project on a stand-alone basis. The resulting point scores may indicate that some new projects should have priorities higher than other projects on the baseline list that are currently under active development. It is generally assumed that ongoing projects should have highest priority and should continue development work regardless of other projects’ emergence. Unfortunately, both emerging reliability issues and regulatory directives may lead the Standards Committee to direct that one or more projects that are currently above

Standards Committee Process for Standards Project Identification, Prioritization, and Monitoring

the cutoff line must now be put on hold until resources become available and development work can be restarted.

The Standards Committee will decide if any of the ongoing projects should be stopped or deferred and advise the respective Standard Drafting Teams (SDTs) accordingly, or develop other remedial actions to launch the new projects and continue with all ongoing projects. If in its judgment none of the ongoing projects should be stopped and the new projects should be launched but no resource relief can be provided, the Standards Committee will bring the situation along with options and recommendations to the Board of Trustees for its attention and direction.

5. Developing Projects Schedules

The time required to complete a standard development project varies from one project to another depending on the scope of work and the complexity of the issues to be addressed. While the SAR proponents generally have a good grasp of the time required to complete a standard project from the formation of the SDT to balloting, the SDT itself may have more intimate knowledge of the technical issues involved and hence a better feel of the time needed to complete its assigned project. Further, since SDT members are industry volunteers that are committed to their projects, it is desirable and appropriate that the SDTs provide inputs into their project schedules and milestone events.

In general, NERC staff together with the Standards Committee will develop an initial project schedule based on past experience, complexity of the standards and other considerations such as available expertise, compliance deadlines, etc. To the extent possible, the SDT should be given the opportunity to review and adjust the project schedule at its initial meetings, and present a revised schedule, where appropriate, to the Standards Committee for consideration. Once approved by the Standards Committee, the SDT will take ownership of the project and its schedule, and monitor and report project progress to the Standards Committee on an as-needed basis.

6. Monitoring Projects

The SDTs are responsible for monitoring all milestone events and completion schedules for their assigned projects. If at any time the milestone dates for a project are expected to be missed, the responsible SDT should report to the Standards Committee, and present options to put the project back on schedule or request accepting delays with supporting rationale. Where necessary, the SDT may seek the Standards Committee's endorsement or advice for other remedial actions including additional resource support, resolution of contentious issues, accepting an extension of the project schedule, or other actions deemed appropriate.

Such reporting should be made at least two months prior to a milestone date in danger of being missed, and at least four months prior to the scheduled completion date (end of re-circulation balloting) that is in danger of being missed. The Standards Committee will act upon receiving a report from the SDT of potential slippage. In its deliberation, it will

Standards Committee Process for Standards Project Identification, Prioritization, and Monitoring

assess impacts of implementing any remedial actions on the status of other ongoing or pending projects.

From time to time, the Standards Committee may request the Chair or a representative of an SDT to report on the progress of a project even there is no indication of a potential slippage.

7. Project Identification, Prioritization and Management Flow Diagram

A flow diagram showing the process described in 1 to 6, above, is shown in Figure 1, attached.

8. Project Prioritization Tool Description

The intent of the Prioritization Tool is to allow for a consistent relative ranking of projects based upon inputs from a variety of sources. An example of the tool is contained in Attachment A of this document. The working version of the tool is maintained by the Standards Committee Process Subcommittee. The tool is a spreadsheet containing information and parameters described as follows:

Rows

Row 1 Contains general information and macro buttons.

The *Click Here to Sort Projects by Priority* macro button simply sorts rows 3 through 250 in descending order of column E (Overall Priority Ranking) and re-establishes the priority number listed in column B (Priority Number).

The *Click Here to Insert a Row* macro button shifts all existing data down one row to insert a blank row in row 3. Data will then need to be entered into the new row.

Row 2 Contains the column headers.

Columns

Column A Blank.

Column B **Priority Number:** The relative ranking of each project as a result of the data input and summed in Column E (**Overall Priority Rating**).

Column C **Project Number and Name**

Column D **Short Description** (of the Project)

Column E **Overall Priority Rating** – The result of summing the inputs in columns F through O. If column N (**Project Percent Complete**) = 100, then E = 0 so that all completed projects fall to the bottom of the priority list.

Column F **Meet a time-constrained regulatory directive** due in:

Less than 12 months = 100

Standards Committee Process for Standards Project Identification, Prioritization, and Monitoring

13 to 18 months = 75

Greater than 18 months = 50

Column G *Address regulatory directives without a time-constraint:*

Directive Index Sum for Project times two, range 0 to 50, rounded to the nearest integer.

Directive Index Calculation:

Q1 - The directive relates to which of the following (choose one or more)?

- Bulk electric system instability – 10 points
- Separation/Islanding – 10 points
- Cascading sequence of failures – 10 points
- Items from the Blackout Report – 9 points
- Regulator Critical – 9 points
- Other operational or planning issues – 4 points
- Administrative issues – 0 points

Q2 - What kind of improvement to BPS reliability will the directive, if addressed, provide?

- Significant – 10 points
- Moderate – 8 points
- Incremental – 6 points
- Minimal – 4 points
- None – 0 points

Take the sum of the Q1 responses, up to a maximum of 20. Add the Q2 response. Then divide by 30. The result is the Individual Directive Index.

$$IDI = (\text{MIN}(20, \text{SUM}(Q1)) + Q2)/30$$

To determine the Project Directive Index, add all the IDIs for the directives assigned to a specific project. Multiply it by two, up to a maximum of 50.

$$PDI = \text{MIN}(50, 2x (\text{SUM}(IDI_1 \dots IDI_n)))$$

Column H *Fill an identified gap in reliability:*

Severe or widespread risk to reliability = 100

Moderate and widespread = 50

Moderate risk or scope = 25

Standards Committee Process for Standards Project Identification, Prioritization, and Monitoring

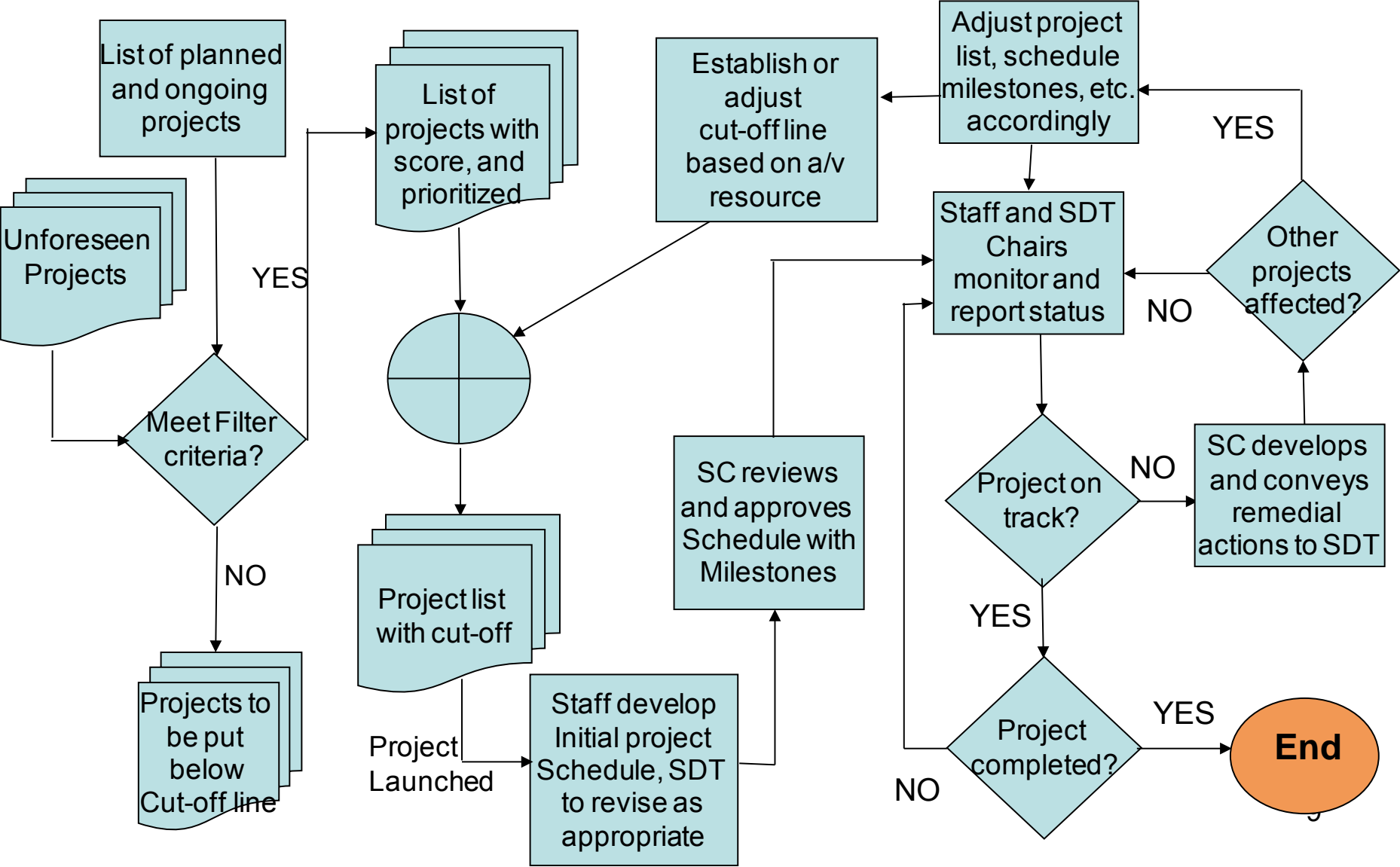
	Small risk = 0
Column I	<i>Improves existing reliability standards:</i> The project includes changes to existing reliability standards or includes new requirements that would improve the overall reliability of the Bulk Electric System. Significantly = 100 Moderately = 75 Incrementally = 50 Minimally = 25 None = 0
Column J	<i>Coordinate changes with another project:</i> Each project that is working in coordination with another project is assigned the same value in the prioritization tool. Coordination is occurring or is needed with another project: Immediately = 50 In 1 to 2 years = 40 In more than 2 years = 30 None needed = 0
Column K	<i>Scheduled for its 5 year review in⁵:</i> 1 year or less = 50 1 to 2 years = 25 2 to 3 years = 15 Over 3 years = 0
Column L	<i>Address compliance issues:</i> Value assigned based upon NERC audit team experience during audits. Consideration also given to the number of registered entity complaints about the standards addressed in this project. Range 0 to 50
Column M	<i>Address failed interpretation or SDT inability to develop and interpretation:</i> Major gap = 50 Moderate gap = 40 Administrative issues = 10 None = 0
Column N	<i>Project Percent Complete:</i> The percentage complete of the project per the NERC @Task software ranging from 0 to 100.
Column O	<i>Other Factor:</i> Value assigned by the Standards Committee and must be accompanied by an explanation of the relative value provided in Column P.

⁵ The rating assigned advises the Standards Committee when a standard is close to its five-year review date; the rating does not indicate whether the standard will meet this five-year review requirement.

Standards Committee Process for Standards Project Identification, Prioritization, and Monitoring

Column P *Explanation:* the explanation of the value set in column O: Other Factor.

Figure 1: Project Prioritization and Monitoring Flow Chart



Standards Committee Process for Standards Project Identification, Prioritization, and Monitoring

Attachment A: Prioritization Tool

NERC Standards Committee
Project Prioritization Worksheet

STANDARDS COMMITTEE Reliability Standard Project Prioritization				(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
						Click Here to Sort Projects by Priority		Click Here to Insert a Row		Cells with this color are blank and need a value entered.				
Priority Number	Project Number and Name	Short Description	Overall Priority Rating	Meet a time-constrained regulatory directive due in: (100) < 12 mo. (75) < 18 mo. (50) > 18 mo.	Address regulatory directives without a time-constraint (Directive Index for Project times two, with 0 to 50 range)	Fill an identified gap in reliability 100 = severe and widespread risk to reliability 75 = moderate and widespread 50 = moderate risk or scope 25 = small risk 0 = none	Improves existing reliability standards: 100 = Significantly 75 = Moderately 50 = Incrementally 25 = Minimally 0 = none	Coordinate changes with another project: 50 = Immediately 40 = in 1 to 2 years 30 = in more than 2 years 0 = none needed	Scheduled for its 5 year review in: 50 = 1 year or less 25 = 1 to 2 years 15 = 2 to 3 years 0 = over 3 years	Address compliance issues (0 to 50)	Address failed interpretation or SDT inability to develop an interpretation 50 = major gap 25 = moderate 10 = admin 0 = none	Project Percent Complete per NERC @Task Software (0 to 100)	OTHER FACTOR (Explanation for the rating must be indicated in the column to the right) (0 to 100)	Explanation
1	Project x	Description of Project X	371	0	50	75	100	0	25	0	50	71	0	
2	Project Y	Description of Project Y	363	0	8	50	100	0	25	50	50	55	25	