NERC

NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

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

to ensure the reliability of the bulk power system

Revised ~~February~~June 2011

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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.

Changes in this Revision

When first used in developing the 2011-2013 Reliability Standard Development Plan (RSDP), the Standards Committee solicited feedback on the use of this tool. Stakeholders submitted several comments and suggestions that the Standards Committee deferred until the development of this revision. In response to those comments and suggestions, ~~and~~as well as other feedback received during the development of this revision, the Standards Committee made the following changes:

- Elimination of the perceived duplication between the process of assigning a score based on the number and type of regulatory directives assigned (previously column G) and the process of assigning scores for "Reliability Gap" (previously column H) and "Reliability Improvement" (previously column I). Some concern has been expressed that ranking the priority of directives assigned to a project based on their reliability impact and then additionally rating a project on its reliability impact was "double counting."
- Addition of a score to account for projects that address ERO Strategic Priorities
- Consolidation of all deadlines (regulatory directive based (previously column F), 5-year review based (column K), or otherwise) into one single new "Time Sensitivity" score. While previously, the Standards Committee felt that time limits derived from directives should be given special consideration, further discussion has led to the questioning of that assertion. Instead, all time limits will be considered, and the Standards Committee may elect to use its judgment to make additional modifications to project prioritization results based on specific knowledge or situations.
- Elimination of the "Project Percent Complete" (previously column N) evaluation
- Addition of two preliminary "cost" considerations
- Modification of the scoring mechanism, such that the "total" score is now the sum of the four subject area scores. In two cases, subject matter scores are no longer simple summations, but instead are determined based on slightly more complex equations.
- The ability to rank projects based on different factors (Reliability, Cost ~~Effectiveness~~Considerations, Time Sensitivity, Practicality, or all factors combined)

Background

Since the startup of the ERO, the number of standards development projects has ~~grown significantly~~been significant. 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. It is expected that this process will occur on an annual basis. ~~Needs that develop outside the annual process will be considered by the Standards Committee on an individual basis~~Projects that are requested mid-cycle will be scored and evaluated as described in Section 7.

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 a deadline.** These deadlines may include the five-year standard revision cycle requirement, regulatory-imposed deadlines, or other time-based commitments.

   b. **To address a Reliability Need** — Industry participants, regulators, 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**~~**To address practical implementation issues.**— 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. These may be indentified through compliance, through the need for interpretations, or through other means (for example, 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).

   The list of standards projects will include all current projects, all projects in informal development, and all new projects that have yet to be initiated.

   ~~c.~~ Although any stakeholder can submit a Standards Authorization Request at any time, NERC will generally solicit project candidates for a fixed period of time prior to beginning its annual prioritization. Requests received outside that window of time will be considered for prioritization either at the next annual prioritization or on a case by case basis.

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.

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. Identifying NERC Project Capacity

NERC staff is only able to manage a finite number of projects at a given point in time, due to the limitations of both staff and industry resources. To estimate this ability, NERC's Capacity for Projects (C_P) will be calculated based on the following formula:

$C_P = 2S_E + S_N$

Where

S_E is the number of Experienced Standards developers (NERC Standards Coordinators or Standards Advisors with at least one year off employment at NERC in that role) on staff , and

S_{AN} is the number of New Standards developers (NERC Standards Coordinators or Standards Advisors with less than one year off employment at NERC in that role) on staff.

In 2012, NERC is expected to have 5 Experienced and 3 New Standards Developers for a total Capacity for Projects of 13. In general, NERC can accommodate 10-12 projects on an ongoing basis. Because some projects are more complex than others, actual assignment of projects may be different than implied by this calculation (for example, an Experienced Standards developer may be assigned one complex project, or three less complex projects). NERC's Standards Committee will work with NERC

staff to determine the total capacity for NERC Standards Development. NERC staff will remain responsible for the actual assignment of staff resources to projects.

3. Identifying the Project Portfolio Mix

Because there are many legitimate reasons for initiating projects, a simple ranking based on priorities is not sufficient. Although focusing on those projects with the greatest reliability need is important, it does not recognize the practical considerations or the time sensitivity of each project. For example, a project with a low reliability impact may nonetheless be associated with a regulatory imposed deadline; or a project may not directly improve reliability, but make a standard much easier to comprehend and implement successfully.

To address this, the Standards Committee allocates Project Capacity to three programs within the Standards Development portfolio: Time Sensitive projects, Practicality projects, and Reliability projects. This allocation ~~happens~~is determined by the Standards Committee each year as the Reliability Standards Development Plan is being drafted. For example, a~~A~~ssuming that the SC will pursue a total of 12 projects in 2012, this could ~~As a starting point, it is recommended that the allocation occur as follows:~~

~~$C_T = (C_P / 4) - (C_P \text{ MODULO } 4)$~~
~~$C_P = (C_P / 4) - (C_P \text{ MODULO } 4)$~~[D21]
~~$C_R = C_P - (C_T + C_P)$~~

~~Where~~

~~C_T, C_P, and C_R is the Program Capacity for Time-sensitive projects, Practicality projects, and Reliability projects, respectively.~~

~~In 2012, this would~~ result in capacity being allocated for three Time-sensitive projects, three Practicality projects, and ~~seven~~six Reliability projects. ~~The Standards Committee has complete discretion in its allocation of Project Capacity to these programs, and may choose to deviate from this recommendation as they see fit.~~

4. Evaluating Each Project

Each project identified will be evaluated in several areas. Members of the Standards Committee will provide the majority of the evaluation data, while NERC staff will only provide information regarding Time-Sensitivity and alignment with ERO Strategic Priorities (columns E and J in Attachment A).

Each representative on the Standards Committee will provide their recommendations for the values assigned to specific areas of each project. NERC will then aggregate and analyze this information and present it to the Standards Committee for review. In general, the arithmetic mean of all Standards Committee input will be used to set the "score" to be used in the prioritization. So if three members selected 50, 75, and 100 out of a possible total 100, the arithmetic mean would be 75.

However, in those cases where significant disagreement is noted between Standards Committee members, further discussion will occur among the Standards Committee to determine if additional changes should be considered. "Significant" disagreement shall be defined as more than 50% of the Standards Committee members participating having scores that are different from the mean by more than 30% of the maximum value for that particular score. So for example, if three members selected 0, 50, and 100, the mean would be 50. However, 66% (two) of the members would have chosen values that were different from the mean by more than 30% (50 points), so further discussion would be required to reconcile the difference.

5. **Determining Cost ~~Effectiveness~~Considerations**

As a first step, all projects will be evaluated for cost ~~effectivenes~~ considerations. This is accomplished by ~~dividing the~~comparing the "reliability" value ~~by~~to the "cost" value~~, to determine the unit of reliability gained per unit of cost expended~~. The calculation of this value is explained in Attachment A's explanation of Column P.

Cost is measured in two areas – the cost to the industry to comply with the standard, and the cost to the industry to demonstrate compliance with the standard. The first area should be focused on the incremental upgrades and investments needed to meet the standard (e.g., equipment purchases, software upgrades, training), while the second area should consider the cost of retaining data and documents, auditing and audit preparation, and reporting.

Projects with a score of less than ~~25~~50 will ~~be identified as~~ generally having a lower ~~return on investment~~benefit relative to cost. When contemplating projects for the Reliability Program area, those with a lower ~~return~~benefit should be carefully considered prior to being initiated. However, a lower ~~return on investment~~ benefit should generally not by itself preclude a project from consideration.

~~2.~~6. ~~**Listing and Prioritizing Baseline Projects**~~**Determining Projects for Each Program**

~~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.~~ For each of the three portfolio program areas (Time Sensitive, Reliability, or Practicality), the Standards Committee will prioritize the list of projects and assign the top priority projects to the programs until program capacity is eliminated.

Following this, the Standards Committee will review any projects that are in progress but are not currently assigned to ~~a~~one of the three portfolio programs. In general, the Standards Committee will displace lower priority projects within the program with ~~the current projects~~projects currently in progress – effectively "filling" the programs with active work before adding new work. However, the Standards Committee may, if it so chooses, halt an existing project in order to move a project that it deems more critical forward.

Next, the Standards Committee will review project interdependencies. If a high-priority project is expected to move forward, and relies on a lower-priority project for completion, then that lower-priority project should displace a higher-priority project to ensure the dependency is honored.

Finally, the Standards Committee will eliminate any duplicate projects that appear in more than one program. The Standards Committee shall make the determination regarding in which program a project should reside. As these duplicate projects are eliminated, other projects may return or be added to the program.

Additionally, the Prioritization will develop a list of potential projects for further research and planning. This list of potential projects will be brought to the Standing Committees for their assistance such that they may be considered in the following year for initiation.

~~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.~~7. Adding New Projects Intra-year 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 a new project~~s~~ emerge~~s~~ and ~~are~~ is evaluated outside the annual prioritization, ~~the Prioritization Tool is designed to score each new project on a stand-alone basis. T~~the resulting point scores may indicate that ~~some~~ the new project~~s~~ 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~~However, 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~~assigned to a program ~~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~~it determines 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.~~8. 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,~~ Then, the SDT ~~should~~ will be given the opportunity to review and adjust the project schedule at its initial meetings, and present a revised schedule, ~~where appropriate~~if necessary, 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.~~9. Monitoring Projects

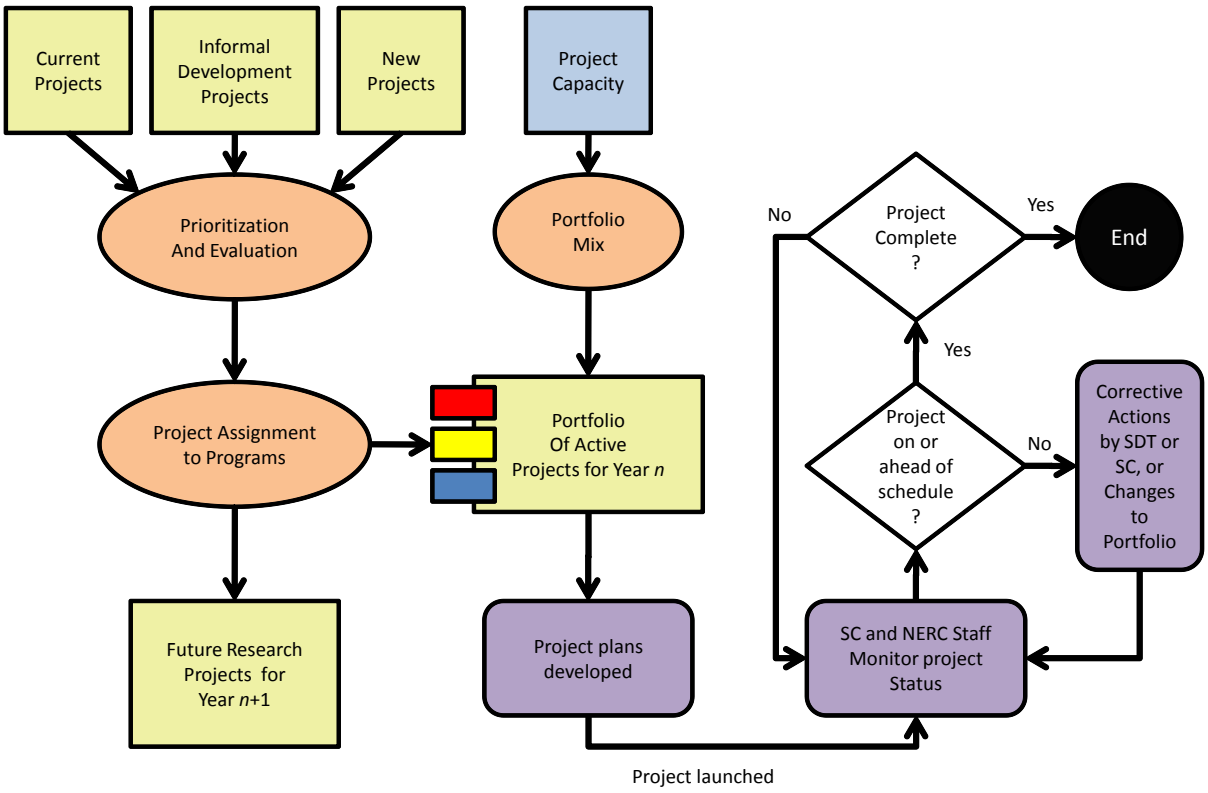
The SDTs are responsible for monitoring all milestone events and completion schedules for their assigned projects. If at any time the milestone dates for a project are expected to be missed, the responsible SDT should report to the Standards Committee, and present options to put the project back on schedule 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.

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 though there is no indication of a potential slippage.

~~7.~~10. Project Identification, Prioritization and Management Flow Diagram

A flow diagram showing the process described in 1 to ~~6~~9 ~~, above,~~ is shown ~~ in Figure 1, attached~~below.



~~TO BE UPDATED~~

~~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:~~

Attachment A – Project Prioritization Tool Details

Below is a detailed description of the values and calculations used in the Project Prioritization Tool.

Rows

Row 1 Contains general information and macro buttons.

The ~~***Click Here to Sort Projects by Priority***~~***"Sort"*** macro button~~s~~ simply sorts rows 3 through 250 in ~~descending~~ descending order of ~~column E (Overall Priority Ranking)~~the associated column and re-establishes the ~~priority number~~rankings listed in column~~s~~ B~~, T, U, V, W, and X as appropriate.~~ ~~(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.

~~The numbers in columns U, W, and X establish the number of projects (x) to identify in the top "x" projects. The number in column V established the threshold for identifying projects that are Cost Effective.~~

Row 2 Contains the column headers.

Columns

Column A Blank.

Column B ***Priority Number:*** The relative ranking or each project as a result of the ~~data input and summed in Column E (***Overall Priority Rating***).~~most recent "Total" Sort performed.

Column C ***Project Number and Name***

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

Column E ~~***Overall Priority Rating***~~***Addresses an ERO Strategic Priority***. If the project is expected to aid in meeting one of the ERO's identified strategic priorities, then 50 points are added to the project reliability score. This value is assigned by NERC staff, and is used to calculate the **Reliability Score.** ~~It is also used with Columns F, G, H, and I in the calculation used to determine the **Cost Effectiveness Score.** – 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, 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 = (MIN(20, 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 = MIN(50, 2x (SUM(IDI_1…IDI_n)))~~

Column ~~H~~F ***Addresses a reliability risk not covered by an existing standard.*** This value is subjective in nature, and will be determined based on the consensus of the Standards Committee. In general, this value is intended to capture "gaps" in the reliability standards, and should consider factors such as how the project relates to instability, separation, or a cascading sequence of failures; how it relates to an adequate level of reliability; and how wide the impact of the project is. A "*Fill-in-the-blank*" standard would be one possible example of a "gap." This value is used to calculate the **Reliability Score.** It is also used with Columns ~~E,~~ G, H, and I in the calculation used to determine the **Cost ~~Effectiveness~~Consideration Score.**

100 = Severe risk

75 = High risk

50 = Moderate risk

25 = Low risk

0 = N/A~~***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~~G ***Improves one or more existing standards.*** This value is subjective in nature, and will be determined based on the consensus of the Standards Committee. In general, this value is intended to capture ways of improving the effectiveness ~~or~~ of existing standards to provide improved reliability, such as raising the minimum level of compliance or adding additional requirements. This value is used to calculate the **Reliability Score.** It is also used with Columns ~~E,~~ F, H, and I in the calculation used to determine the **Cost ~~Effectiveness~~Consideration Score.** The project is expected to improve reliability:

100 = Significantly

75 = Moderately

50 = Incrementally

25 = Minimally

0 = N/A~~***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~~

~~Incrementally = 50~~

~~Minimally = 25~~

~~None = 0~~

Column ~~J~~H ***Cost of ~~Reliability~~Implementation.*** This value is subjective in nature, and will be determined based on the consensus of the Standards Committee. This value is used with Columns ~~E,~~ F, G, and I in the calculation of the **Cost ~~Effectiveness~~Consideration Score,** and should consider such items as equipment purchases or upgrades, training, and similar costs. In other words, what would it

cost the industry to become compliant with the standard? When considered in aggregate, the cost of complying with the standard is expected to be:

100 = Very high

75 = High

50 = Average

25 = Low

0 = Very Low~~***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~~I ***Cost of Administration.*** This value is subjective in nature, and will be determined based on the consensus of the Standards Committee. This value is used with Columns ~~E,~~ F, G, and H in the calculation of the **Cost ~~Effectiveness~~Consideration Score,** and should consider things such as the cost to retain data, the cost to document, and the cost of compliance staff evaluating data. In other words, what would it cost the industry (including applicable entities, regions, and NERC) to prove that the standard is being complied with? When considered in aggregate, the cost to demonstrate and verify compliance is expected to be:

100 = Very high

75 = High

50 = Average

25 = Low

0 = Very Low~~***Scheduled for its 5 year review in*** [1]***:***~~

~~1 year or less = 50~~

~~1 to 2 years = 25~~

~~2 to 3 years = 15~~

~~Over 3 years = 0~~

Column ~~L~~J ***Time Sensitivity.*** Number of months until due date, if any, from the time the prioritization is effective. For example, in 2012, this should be the number of

~~[1] 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.~~

months from January 2012 to the due date. This value is assigned by NERC staff, and is used to calculate the **Time Sensitivity Score.** 0 indicateds no deadline exists within the subsequent 60 months.***Address compliance issues:*** Value assigned based upon NERC audit team experience during audits. Consideration also givento the number of registered entity complaints about the standards addressed in this project. Range 0 to 50

Column MK ***Addresses compliance issues from NERC Staff or Stakeholders.*** This value is subjective in nature, and will be determined based on the consensus of the Standards Committee. For example, if Compliance had idenfied a frequently violated standard, or standards for which one or more CAN's had been developed, or standard which has been identified by stakeholders as being difficult to comprehend. This value is used to calculate the **Practicality Score.**

50 =Significant issues

25 = Moderate issues

10 = Minimal issues

0 = N/A***Address failed interpretation or SDT inability to develop and interpretation:***

Major gap = 50

Moderate gap = 40

Administrative issues = 10

None = 0

Column L ***Addresses a failed interpretation or SDT inability to develop an interpretation.*** This value is subjective in nature, and will be determined based on the consensus of the Standards Committee. This value is used to calculate the **Practicality Score.** The interpretation is needed to address a lack of clarity that is:

50 = Significant

25 = Moderate

10 = Minimal

0 = N/A

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

Column O M ***Other Factor Practicality Concern:.*** Value assigned by the Standards Committee This value is subjective in nature, and will be determined based on the consensus of the Standards Committee. An example of a project that would have points assigned here is the Vegetation ManacementManagement project because of it being used at the prototype results based standard. Additional considerations would be the breadth of impact to registered entities, projects with active field trials, the length of time project has been in the queue, and projects that clarify a standard or delete redundant requirements. and Addressing *"Fill-in-the-blank"* standard would be another area where practicality might drive a need to develop a

standard by eliminating the potential for duplicate work among the regions. Between 0 and 50. ~~breadth of impact to registered entities,~~This value is used to calculate the **Practicality Score**, and ~~and m~~must be accompanied by an explanation of the relative value provided in Column ~~P~~N.

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

Column O ***Reliability Score.*** The sum of columns E, F, and G. Between 0 and 250.

Column P ***Cost Effectiveness~~Consideration Score.*** Calculated based on the ~~Reliability Score~~sum of columns F and G ~~divided by the sum of column H and I, then divided by two. If H and I are zero, then the **Cost Effectiveness Score** is equal to one-half the **Reliability Score**~~.less the sum of the columns H and I, then scaled to produce a value b~~ B~~etween 0 and 1~~2~~500. Projects with no reliability benefit are automatically scored as 0. ~~Conceptually this results in standards that are less costly to implement and prove compliance having a higher priority than those that are more costly.~~

Column Q ***Time Sensitivity Score.*** Calculated by dividing the number of months in column J by sixty, subtracting that value from one, and then multiplying by 100 and rounding. If the number of months is zero or greater than 60, then the score is set at 0. This results in projects with a closer deadline having a higher priority.

Column R ***Practicality Score.*** The sum of columns K, L, and M. Between 0 and ~~20~~150.

Column S ***Total Score.*** The sum of the **Reliability Score, Cost ~~Effectiveness~~Consideration Score, Time Sensitivity Score,** and **Practicality Score.** Based on total scores, results in a weighted score with approximately the following distribution of weights:

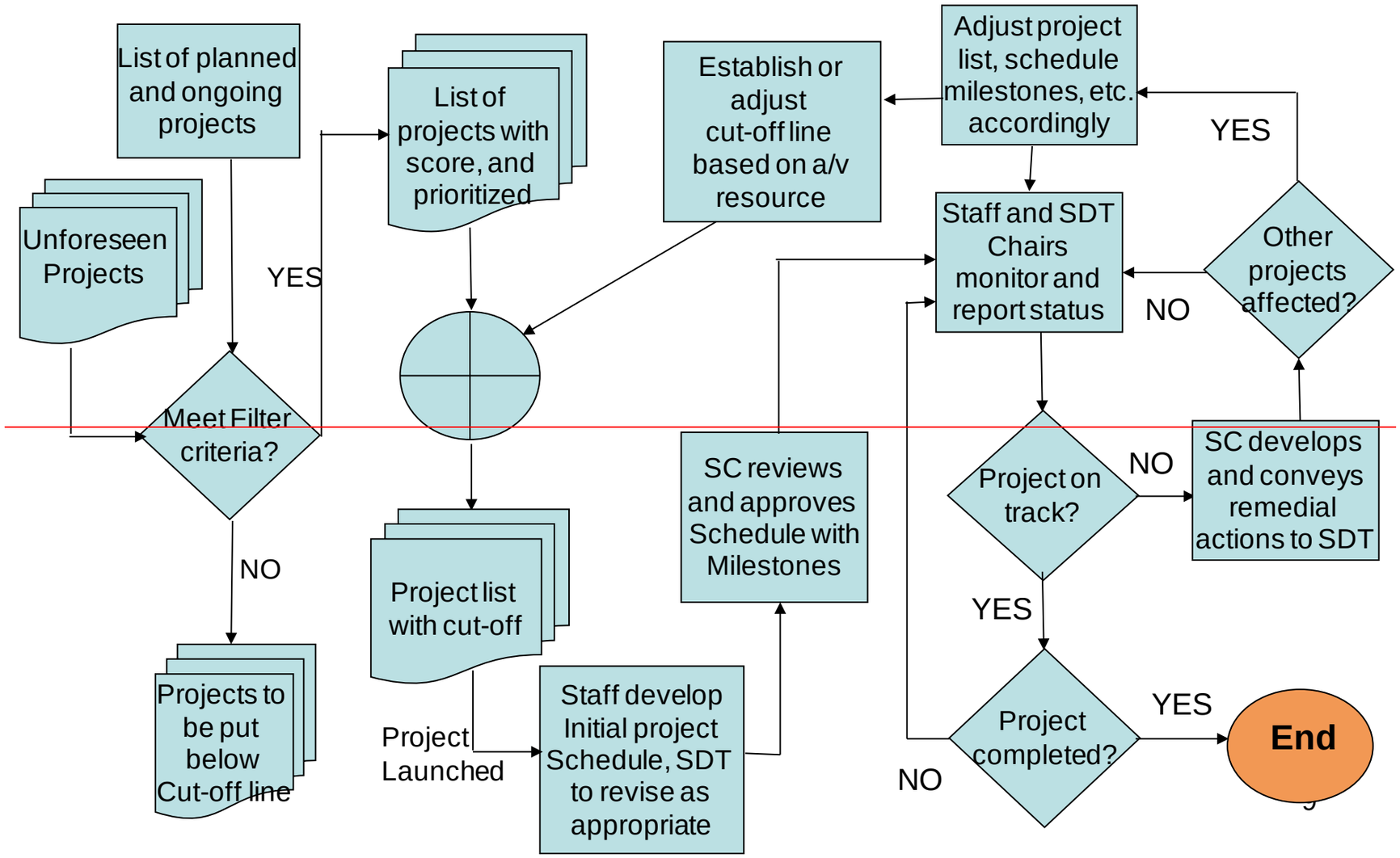
Reliability ~~37~~41.6%
Cost ~~Effectiveness~~Consideration ~~18~~16.7%
Time Sensitivity ~~15~~16.7%
Practicality ~~30~~25%

Columns T-X ***Rankings.*** The numbers show the rankings for each area, and color codes the cells based on the following:

- The top *n* projects, where *n* is the number at the top of the column for columns U, W, and X
- All projects with a Cost Consideration Score greater than or equal to *n*, where *n* is the number at the top of column V.

~~Columns T-X ***Rankings.*** The numbers show the rankings for each area, and color codes the cells based on the following:~~
~~The top *n* projects, where *n* is the number at the top of the column for columns U, W, and X~~
~~All projects with a Cost Effectiveness Score greater than or equal to *n*, where *n* is the number at the top of column V.~~

~~Figure 1: Project Prioritization and Monitoring Flow Chart~~



Attachment ~~A~~B: 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	

STANDARDS COMMITTEE Reliability Standard Project Prioritization			(E) Click Here to Insert a Row	(F)	(G)	(H)	(I)	(J)	(K)	(L) Cells with this color are blank and need a value entered.	(M)	(N)	SUMMARY Sort	Sort	Sort	Sort	Sort	
Priority Number	**Project Number and Name**	**Short Description**	**Addresses an ERO Strategic Priority** (to be completed by NERC Staff) 50 = Yes 0 = No	**Addresses a reliability risk not covered by an existing standard** 100 = Severe risk 75 = High risk 50 = Moderate risk 25 = Low risk 0 = N/A	**Improves one or more existing standards:** 100 = Significantly 75 = Moderately 50 = Incrementally 25 = Minimally 0 = N/A	**Cost of Reliability** The cost of complying with the standard is expected to be: 100 = Very high 75 = High 50 = Average 25 = Low 0 = Very Low	**Cost of Administration** The cost to demonstrate compliance is expected to be: 100 = Very high 75 = High 50 = Average 25 = Low 0 = Very Low	**Time Sensitivity** (to be competed by NERC Staff) Number of months until due date, if any	**Addresses compliance issues from NERC Staff or Stakeholders** 50 = Significant issues 25 = Moderate issues 10 = Minimal issues 0 = N/A	**Addresses a failed interpretation or SDT inability to develop an interpretation related to a lack of clarity that is** 50 = Significant 25 = Moderate 10 = Minimal 0 = N/A	**Other Practicality Concern** (Explanation for the rating must be indicated in the column to the right) (0 to 100)	**Explanation**	**Reliability Score (0 - 250)**	**Cost Effectiveness Score (0 - 125)**	**Time Sensitivity Score (0 - 100)**	**Practicality Score (0 - 200)**	**Total Score (0-675)**	**RANKING**
1	Project 2007-17 Protection System Maintenance & Testing	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.											0	0	0	0	0	1
2	Project 2007-06 System Protection Coordination	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.											0	0	0	0	0	2
3	Project 2007-12 Frequency Response	Requires entities to provide data needed to model each interconnection's frequency response.											0	0	0	0	0	3
4	Project 2010-05.1 Phase 1 of Protection Systems: Misoperations	Modify current PRC-003 and -004 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. Does not include SPS and RAS.											0	0	0	0	0	4
5	Project 2008-06 Cyber Security - Order 706	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.											0	0	0	0	0	5
6	Project 2010-07 Transmission Requirements at the Generator Interface	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.											0	0	0	0	0	6
7	Project 2009-01 Disturbance and Sabotage Reporting	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.											0	0	0	0	0	7
8	Project 2009-07 Reliability of Protection Systems	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.											0	0	0	0	0	8
9	Project 2007-02 Operating Personnel Communications Protocols	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											0	0	0	0	0	9