

Five-Year Review Recommendation to Revise FAC-002-1: Coordination of Plans for New Facilities

Introduction

NERC has an obligation to conduct periodic reviews of each Reliability Standard developed through NERC's American National Standards Institute-accredited Reliability Standards development process. While FAC-002-1 became enforceable on October 1, 2011, it has not been substantively revised and thus is being reviewed as part of the overall FAC five-year review process.

The NERC Standards Committee appointed six industry experts to serve on the FAC five-year review team (FYRT) on April 22, 2013. FYRTs use the background information and the questions set forth in the Five-Year Review Template developed by NERC and approved by the NERC Standards Committee, along with associated worksheets and reference documents, to guide a comprehensive review that results in a recommendation that the Reliability Standard should be (1) affirmed as is (i.e., no changes needed); (2) revised (which may include revising or retiring one or more requirements); or (3) withdrawn.

The FYRT recommends **REVISING** FAC-002-1. Alongside this recommendation, the FYRT has posted a draft Standard Authorization Request (SAR) for information.

¹ The currently effective Standard Processes Manual (SPM), which became effective on June 27, 2013, obligates NERC to conduct periodic reviews of all Reliability Standards at least once every ten years, and periodic reviews only of those standards that are American National Standards (approved by the American National Standards Institute) at least once every five years. None of the FAC standards is an American National Standard, and thus the FAC standards would only require review at least once every ten years under the current SPM. However, the former SPM, which became effective on January 31, 2012, required all standards to undergo a five-year review, and this five-year review process was launched under that SPM. The periodic review process is addressed on page 45 of the current SPM: http://www.nerc.com/pa/Stand/Resources/Documents/Appendix 3A StandardsProcessesManual.pdf.



Applicable Reliability Standard: FAC-002-1

Team Members:

- 1. John Beck (Chair), Consolidated Edison Co. of New York
- 2. Michael Steckelberg (Vice Chair), Great River Energy
- 3. Brian Dale, Georgia Power Company
- 4. Ruth Kloecker, ITC Holdings
- 5. Stewart Rake, Luminant Generation Company
- 6. Ganesh Velummylum, Northern Indiana Public Service Company
- 7. Mallory Huggins (Lead Standards Developer), NERC
- 8. Sean Cavote (Supporting Standards Developer), NERC
- 9. Ed Dobrowolski (Supporting Standards Developer), NERC

Date Review Completed: 07/19/13





Background Information (completed by NERC staff)

1.	Are there any outstanding Federal Energ Reliability Standard?	y Regulatory Commission directives associated wit	h the
	☐ No		

There are two outstanding directives from FERC Order 693² that apply to FAC-002-0. The first directs NERC to consider incorporating a reference to TPL-004-0 in FAC-002-0. This directive is outdated. FERC has issued a Notice of Proposed Rulemaking proposing to approve TPL-001-4, which will combine the four TPL standards, so the reference in FAC-002 will need to be changed to reference TPL-001-4.

The second outstanding directive related to FAC-002-0 asked NERC to consider the comments of various entities asking for clarification of R1.

- APPA requested that the Reliability Standard be clarified to state that the required assessment
 must be performed only by the Transmission Planner and the Planning Authority. Related, TAPS
 expressed concern that Load-Serving Entities are not equipped to perform assessments.
 California Cogeneration expressed a similar concern about Generator Owners' ability to
 perform an assessment.
 - The FYRT recommends addressing these concerns by splitting R1 into three requirements that better clarify the responsibilities of all entities involved. As envisioned by the FYRT, a new R1 would focus exclusively on the Transmission Planner and Planning Authority's responsibility for conducting assessments, and a new R2 and R3 would separate out the requirement for Generator Owners, Transmission Owners, Distribution Providers, and Load-Serving Entities to simply coordinate and cooperate on those assessments.
- Xcel requested that the Commission clarify that only one required assessment needs to be done
 when new facilities are added, and that all the listed entities should participate in that single
 assessment.
 - The FYRT agrees that it is possible that only one assessment may be necessary, and in that case all entities could simply participate and sign on to that assessment, but in other cases, multiple assessments might be conducted and later coordinated.
- FirstEnergy requested that NERC clarify what is considered a new facility and asks if, for example, up-rates should be included as new facilities.

² FERC Order No. 693, which approved 83 Reliability Standards as mandatory and effective, is available here: http://www.nerc.com/FilingsOrders/us/FERCOrdersRules/ORDER%20693.pdf.



- The FYRT believes the determination of whether an up-rate needs to be assessed the same way as a new facility is up to the entity that's conducting the study, and that such decisions will vary by region.
- Six Cities requested that this Reliability Standard clarify that all applicable entities must make available data necessary for all other responsible entities to perform the required assessment.
 - The FYRT believes that the requirement to coordinate and cooperate requires the sharing of all data necessary for conducting an assessment.
- Six Cities also suggested that the transmission operator be added as an entity to which this
 Reliability Standard is applicable, at least from the perspective that it make necessary data
 available to all other entities responsible for assessment.
 - The FYRT believes that data from the Transmission Owner would account for the necessary data from the transmission side. It would be the responsibility of the Transmission Planner or Planning Authority to include any relevant operations data.
- FirstEnergy stated that both MISO and PJM already have Large Generator Interconnection Procedures (LGIP) in place that provide a formal process that meets the requirements listed under R1, and asks that the Commission state that complying with the interconnection agreement and/or OATT satisfies this requirement.
 - The FYRT points out that regardless of what's covered in a tariff, requirements for interconnecting new facilities still need to be addressed in NERC's Reliability Standards. The requirement for Open Access Transmission Tariffs varies from region to region. FERC handles market-related documents like tariffs differently from reliability-related documents like standards, and reliability standards should not rely upon market-related documents to address reliability issues.

2.	Have stakeholders requested clarity on the Reliability Standard in the form of an Interpretation (outstanding, in progress, or approved), Compliance Application Notice (CAN) (outstanding, in progress, or approved), or an outstanding submission to NERC's Issues Database? (If there are, NERC staff will include a list of the Interpretation(s), CAN(s), or stakeholder-identified issue(s) contained in the NERC Issues Database that apply to the Reliability Standard.)
	☐ Yes ☑ No
3.	Is the Reliability Standard one of the most violated Reliability Standards? If so, does the root cause of the frequent violation appear to be a lack of clarity in the language?
	☐ Yes ☑ No



Please explain: FAC-002-1 is not one of the most frequently violated Reliability Standards, but all of the requirements in FAC-002-1 do appear on the 2013 Actively Monitored List.³ R1 and R1.3 are Tier 1; R1.1, R1.2, R1.4, and R1.5 are Tier 2.

4. Does the Reliability Standard need to be converted to the results-based standard format as outlined in *Attachment 1: Results-Based Standards*? (Note that the intent of this question is to ensure that, as Reliability Standards are reviewed, the formatting is changed to be consistent with the current format of a Reliability Standard. If the answer is yes, the formatting should be updated when the Reliability Standard is revised.)



No



http://www.nerc.com/pa/comp/Resources/ layouts/xlviewer.aspx?id=/pa/comp/Resources/ResourcesDL/2013%20Actively_Monitored_Reliability_Standards_rev3.xlsx&Source=http%3A%2F%2Fwww%2Enerc%2Ecom%2Fpa%2Fcomp%2FResources%2FPages%2Fdefault%2Easpx&DefaultItemOpen=1&DefaultItemOpen=1.



Questions for SME Review Team

1. **Paragraph 81**: Does one or more of the requirements in the Reliability Standard meet criteria for retirement or modification based on Paragraph 81 concepts? Use *Attachment 2: Paragraph 81 Criteria* to make this determination.

Yes

Please summarize your application of Paragraph 81 Criteria, if any: R2 has already been proposed for retirement by the Paragraph 81 review team. The FYRT recommends that R1 be modified but retained in the interest of reliability. One subpart, R1.2, should be considered for possible P81 retirement. R1.2 requires the ensurance of compliance with "NERC Reliability Standards and applicable Regional, subregional, Power Pool, and individual system planning criteria and facility connection requirements of the impacted systems."

A similar reference is contained in FAC-001-1 R1 and R2, which require compliance with "NERC Reliability Standards and applicable Regional Entity, subregional, Power Pool, and individual Transmission Owner planning criteria and Facility connection requirements." While the entities to which the FAC-001-1 and FAC-002-1 requirements are assigned differ, the concepts may be redundant (Criterion B7) and possibly not necessary for reliability, as the requirement to comply with NERC Reliability Standards, applicable Regional criteria, etc. is built into the ERO framework established in Order 672.⁴ A drafting team may determine that the language is not necessary in either standard, but if this language is deemed necessary for reliability, it should be retained only in FAC-002-1, R1.2.

The FYRT also discussed whether R1, which requires that assessments be conducted, is redundant with TPL-001-4, R2, which requires Transmission Planners and Planning Coordinators to prepare Planning Assessments for their portions of the BES. The team determined that the assessment requirement in FAC-002-1 is distinct from TPL-001-4, R2; a Planning Assessment under TPL would be for existing facilities or interconnections, whereas FAC-002 requires a similar kind of assessment to TPL, but it's a *pre-interconnection* assessment for new facilities that may or may not end up interconnecting. Once the facilities are interconnected, they would be covered under TPL, but until then, the potential impact is evaluated under FAC-002.

⁴ Order 672 – Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Electric Reliability Standards is posted here: http://www.nerc.com/FilingsOrders/us/FERCOrdersRules/final_rule_reliability_Order_672.pdf.



During Phase 1 of the Paragraph 81 process, the review team received one comment expressing concern about R1, stating that the requirement assigns responsibility to the wrong functional entity. The FYRT believes this concern could be addressed by splitting R1 into three requirements that better clarify the responsibilities of all entities involved, as considered below.

- 2. **Clarity:** If the Reliability Standard has an Interpretation, CAN, or issue associated with it, or is frequently violated because of ambiguity, it probably needs to be revised for clarity. Beyond these indicators, is there any reason to believe that the Reliability Standard should be modified to address a lack of clarity? Consider:
 - a. Is this a Version O Reliability Standard?
 - b. Does the Reliability Standard have obviously ambiguous language or language that requires performance that is not measurable?
 - c. Are the requirements consistent with the purpose of the Reliability Standard?

Yes		
No		

Please summarize your assessment: For clarity and consistency with the proposed TPL-001-4 and the Functional Model, the FYRT recommends changing the applicable functional entity of "Planning Authority" to "Planning Coordinator."

FAC-002-1, R1 is necessary for reliability, but the FYRT believes that it is unclear as written, especially in the manner in which it assigns responsibility by functional entity. The FYRT recommends splitting R1 into different requirements to add clarity and better distinguish among the required actions. Additionally, the team recommends revising some of the original R1 subparts, because they currently read like Measures rather than requirements. Currently, R1 reads as follows:

- **R1.** The Generator Owner, Transmission Owner, Distribution Provider, and Load-Serving Entity seeking to integrate generation facilities, transmission facilities, and electricity end-user facilities shall each coordinate and cooperate on its assessments with its Transmission Planner and Planning Authority. The assessment shall include:
 - **1.1.** Evaluation of the reliability impact of the new facilities and their connections on the interconnected transmission systems.
 - **1.2.** Ensurance of compliance with NERC Reliability Standards and applicable Regional, subregional, Power Pool, and individual system planning criteria and facility connection requirements.



- **1.3.** Evidence that the parties involved in the assessment have coordinated and cooperated on the assessment of the reliability impacts of new facilities on the interconnected transmission systems. While these studies may be performed independently, the results shall be jointly evaluated and coordinated by the entities involved.
- **1.4.** Evidence that the assessment included steady-state, short-circuit, and dynamics studies as necessary to evaluate system performance under both normal and contingency conditions in accordance with Reliability Standards TPL-001-0, TPL-002-0, and TPL-003-0.
- **1.5.** Documentation that the assessment included study assumptions, system performance, alternatives considered, and jointly coordinated recommendations.

The FYRT recommends splitting R1 into the following three requirements: one requiring the Transmission Planner and Planning Coordinator to conduct assessments (new R1), one requiring Generator Owners to coordinate and cooperate with the Transmission Planner and Planning Coordinator as those assessments are conducted (new R2), and one requiring Transmission Owners, Distribution Providers, and Load-Serving Entities to coordinate and cooperate with the Transmission Planner and Planning Coordinator as those assessments are conducted (new R3). The FYRT recommends ordering the requirements so that the new R1, which focuses on what needs to be included in an assessment, comes before R2 and R3, which focus on the entities that need to coordinate and cooperate with the entities conducting the assessments.

The FYRT also recommends moving the current R1.1-1.5 under the new R1, with deletion of most of R1.3 (and possibly R1.2, as discussed above under the section on Paragraph 81). R1.3 reads like more of a Measure for the coordination and cooperation aspect of the standard, but the last sentence of original R1.3 ("While these studies may be performed independently, the results shall be jointly evaluated and coordinated by the entities involved.") should be added to the new R1.1 to ensure that some reference to coordinating with third parties and end users is included. Similarly, the FYRT does not believe it is clear whether "the interconnected transmission Systems" in R1.1 include adjacent Transmission system(s). A drafting team should consider whether adjacent Transmission systems need to be explicitly included in the requirement language.

The FYRT also recommends the modification of the current R1.4 and R1.5 to make them read more like subparts of a requirement and less like Measures. For instance, the team recommends that phrases like "evidence that..." be deleted.

Finally, both the title of the standard and the purpose statement should be reviewed to ensure that they accurately reflect the requirements in FAC-002-1.

3.	Definitions : Do any of the defined terms used within the Reliability Standard need to be refined?
	Yes



	⊠ No
	Please explain: None of the defined terms used within the Reliability Standard need to be refined. However, the drafting team should review the standard and ensure that all NERC Glossary Terms that could be capitalized (e.g., Facility, Transmission) are appropriately capitalized.
4.	Compliance Elements: Are the compliance elements associated with the requirements (Measures, Data Retention, VRFs, and VSLs) consistent with the direction of the Reliability Assurance Initiative and FERC and NERC guidelines? If you answered "No," please identify which elements require revision, and why:
	∑ Yes □ No
	FAC-002-1 VSLs, VRFs, and Measures are consistent with NERC and FERC guidelines, but if a drafting team revises the standard, the VSLs, VRFs, and Measures will all need to be revised and incorporated into the body of the standard. Time Horizons will also need to be incorporated into the requirements. The Data Retention section of the standard should be updated to ensure that it is consistent with current NERC guidance on compliance language within a standard.
5.	Consistency with Other Reliability Standards: Does the Reliability Standard need to be revised for formatting and language consistency among requirements within the Reliability Standard or consistency with other Reliability Standards? If you answered "Yes," please describe the changes needed to achieve formatting and language consistency:
	□ No
6.	Changes in Technology, System Conditions, or other Factors: Does the Reliability Standard need to be revised to account for changes in technology, system conditions, or other factors? If you answered "Yes," please describe the changes and specifically what the potential impact is to reliability if the Reliability Standard is not revised:
	☐ Yes ☑ No



7.	Consideration of Generator Interconnection Facilities: Is responsibility for generator interconnection Facilities appropriately accounted for in the Reliability Standard?
	∑ Yes ☐ No

Guiding Questions:

If the Reliability Standard is applicable to GOs/GOPs, is there any ambiguity about the inclusion of generator interconnection Facilities? (If generation interconnection Facilities could be perceived to be excluded, specific language referencing the Facilities should be introduced in the Reliability Standard.) No.

If the Reliability Standard is not applicable to GOs/GOPs, is there a reliability-related need for treating generator interconnection Facilities as transmission lines for the purposes of this Reliability Standard? (If so, GOs and GOPs that own or operate relevant generator interconnection Facilities should be explicit in the applicability section of the Reliability Standard.) Not applicable.



Recommendation

The answers to the questions above, along with a preliminary recommendation of the SMEs conducting the review of the Reliability Standard, will be posted for a 45-day informal comment period, and the comments publicly posted. The SMEs will review the comments to evaluate whether to modify their initial recommendation, and will document the final recommendation which will be presented to the Standards Committee.

Preliminary Recommendation from the FYRT:	
AFFIRM	
□ REVISE	
RETIRE	
Technical Justification (If the SME team recommends that the Reliability Standard be revised, a draft SAR may be included and the technical justification included in the SAR): As considered in more detail above, to eliminate redundancy, clarify the responsibilities of all entities involved in the standard, and update references to TPL standards, the FYRT recommends revising FAC-002-1. The standard should also be transferred to the new Results-Based Standard template.	
Preliminary Recommendation posted for industry comment (date): MM/DD/13	
Final Recommendation (to be completed by the SME team after it has reviewed industry comments on the preliminary recommendation):	
AFFIRM (This should only be checked if there are no outstanding directives, interpretations or issues identified by stakeholders.)	
REVISE	
RETIRE	
Technical Justification (If the SME team recommends that the Reliability Standard be revised, a draft SAR may be included and the technical justification included in the SAR):	
Date submitted to NERC Staff:	



Attachment 1: Results-Based Standards

The fourth question for NERC staff asks if the Reliability Standard needs to be converted to the results-based standards (RBS) format. The information below will be used by NERC staff in making this determination, and is included here as a reference for the SME team and other stakeholders.

RBS standards employ a defense-in-depth strategy for Reliability Standards development where each requirement has a role in preventing system failures and the roles are complementary and reinforcing. Reliability Standards should be viewed as a portfolio of requirements designed to achieve an overall defense-in-depth strategy and comply with the quality objectives identified in the resource document titled, "Acceptance Criteria of a Reliability Standard."

A Reliability Standard that adheres to the RBS format should strive to achieve a portfolio of performance-, risk-, and competency-based mandatory reliability requirements that support an effective defense-in-depth strategy. Each requirement should identify 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.

- a. **Performance-Based**—defines a particular reliability objective or outcome to be achieved. In its simplest form, a results-based requirement has four components: who, under what conditions (if any), shall perform what action, to achieve what particular result or outcome?
- b. **Risk-Based**—preventive requirements to reduce the risks of failure to acceptable tolerance levels. A risk-based reliability requirement should be framed as: who, under what conditions (if any), shall perform what action, to achieve what particular result or outcome that reduces a stated risk to the reliability of the bulk power system?
- c. **Competency-Based**—defines a minimum set of capabilities an entity needs to have to demonstrate it is able to perform its designated reliability functions. A competency-based reliability requirement should be framed as: who, under what conditions (if any), shall have what capability, to achieve what particular result or outcome to perform an action to achieve a result or outcome or to reduce a risk to the reliability of the bulk power system?

Additionally, each RBS-adherent Reliability Standard should enable or support one or more of the eight reliability principles listed below. Each Reliability Standard should also be consistent with all of the reliability principles.

1. Interconnected bulk power systems shall be planned and operated in a coordinated manner to perform reliably under normal and abnormal conditions as defined in the NERC Standards.



- 2. The frequency and voltage of interconnected bulk power systems shall be controlled within defined limits through the balancing of real and reactive power supply and demand.
- 3. Information necessary for the planning and operation of interconnected bulk power systems shall be made available to those entities responsible for planning and operating the systems reliably.
- 4. Plans for emergency operation and system restoration of interconnected bulk power systems shall be developed, coordinated, maintained, and implemented.
- 5. Facilities for communication, monitoring, and control shall be provided, used, and maintained for the reliability of interconnected bulk power systems.
- 6. Personnel responsible for planning and operating interconnected bulk power systems shall be trained, qualified, and have the responsibility and authority to implement actions.
- 7. The reliability of the interconnected bulk power systems shall be assessed, monitored, and maintained on a wide-area basis.
- 8. Bulk power systems shall be protected from malicious physical or cyber attacks.

If the Reliability Standard does not provide for a portfolio of performance-, risk-, and competency-based requirements or consistency with NERC's reliability principles, NERC staff should recommend that the Reliability Standard be reformatted in accordance with RBS format.



Attachment 2: Paragraph 81 Criteria

The first question for the SME Review Team asks if one or more of the requirements in the Reliability Standard meet(s) criteria for retirement or modification based on Paragraph 81 concepts. Use the Paragraph 81 criteria explained below to make this determination. Document the justification for the decisions throughout and provide them in the final assessment in the Five-Year Review worksheet.

For a Reliability Standard requirement to be proposed for retirement or modification based on Paragraph 81 concepts, it must satisfy **both**: (i) Criterion A (the overarching criterion) and (ii) at least one of the Criteria B listed below (identifying criteria). In addition, for each Reliability Standard requirement proposed for retirement or modification, the data and reference points set forth below in Criteria C should be considered for making a more informed decision.

Criterion A (Overarching Criterion)

The Reliability Standard requirement requires responsible entities ("entities") to conduct an activity or task that does little, if anything, to benefit or protect the reliable operation of the BES.

Section 215(a) (4) of the United States Federal Power Act defines "reliable operation" as: "... operating the elements of the bulk-power system within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or cascading failures of such system will not occur as a result of a sudden disturbance, including a cybersecurity incident, or unanticipated failure of system elements."

Criteria B (Identifying Criteria)

B1. Administrative

The Reliability Standard requirement requires responsible entities to perform a function that is administrative in nature, does not support reliability and is needlessly burdensome.

This criterion is designed to identify requirements that can be retired or modified with little effect on reliability and whose retirement or modification will result in an increase in the efficiency of the ERO compliance program. Administrative functions may include a task that is related to developing procedures or plans, such as establishing communication contacts. Thus, for certain requirements, Criterion B1 is closely related to Criteria B2, B3 and B4. Strictly administrative functions do not inherently negatively impact reliability directly and, where possible, should be eliminated or modified for purposes of efficiency and to allow the ERO and entities to appropriately allocate resources.

⁵ In most cases, satisfaction of the Paragraph 81 criteria will result in the retirement of a requirement. In some cases, however, there may be a way to modify a requirement so that it no longer satisfies Paragraph 81 criteria. Recognizing that, this document refers to both options.



B2. Data Collection/Data Retention

These are requirements that obligate responsible entities to produce and retain data which document prior events or activities, and should be collected via some other method under NERC's rules and processes.

This criterion is designed to identify requirements that can be retired or modified with little effect on reliability. The collection and/or retention of data do not necessarily have a reliability benefit and yet are often required to demonstrate compliance. Where data collection and/or data retention is unnecessary for reliability purposes, such requirements should be retired or modified in order to increase the efficiency of the ERO compliance program.

B3. Documentation

The Reliability Standard requirement requires responsible entities to develop a document (e.g., plan, policy or procedure) which is not necessary to protect BES reliability.

This criterion is designed to identify requirements that require the development of a document that is unrelated to reliability or has no performance or results-based function. In other words, the document is required, but no execution of a reliability activity or task is associated with or required by the document.

B4. Reporting

The Reliability Standard requirement obligates responsible entities to report to a Regional Entity, NERC or another party or entity. These are requirements that obligate responsible entities to report to a Regional Entity on activities which have no discernible impact on promoting the reliable operation of the BES and if the entity failed to meet this requirement there would be little reliability impact.

B5. Periodic Updates

The Reliability Standard requirement requires responsible entities to periodically update (e.g., annually) documentation, such as a plan, procedure or policy without an operational benefit to reliability.

This criterion is designed to identify requirements that impose an updating requirement that is out of sync with the actual operations of the BES, unnecessary, or duplicative.

B6. Commercial or Business Practice

The Reliability Standard requirement is a commercial or business practice, or implicates commercial rather than reliability issues.



This criterion is designed to identify those requirements that require: (i) implementing a best or outdated business practice or (ii) implicating the exchange of or debate on commercially sensitive information while doing little, if anything, to promote the reliable operation of the BES.

B7. Redundant

The Reliability Standard requirement is redundant with: (i) another FERC-approved Reliability Standard requirement(s); (ii) the ERO compliance and monitoring program; or (iii) a governmental regulation (e.g., Open Access Transmission Tariff, North American Energy Standards Board ("NAESB"), etc.).

This criterion is designed to identify requirements that are redundant with other requirements and are, therefore, unnecessary. Unlike the other criteria listed in Criterion B, in the case of redundancy, the task or activity itself may contribute to a reliable BES, but it is not necessary to have two duplicative requirements on the same or similar task or activity. Such requirements can be retired or modified with little or no effect on reliability and removal will result in an increase in efficiency of the ERO compliance program.

Criteria C (Additional data and reference points)

Use the following data and reference points to assist in the determination of (and justification for) whether to proceed with retirement or modification of a Reliability Standard requirement that satisfies both Criteria A and B:

C1. Was the Reliability Standard requirement part of a FFT filing?

The application of this criterion involves determining whether the requirement was included in a FFT filing.

C2. Is the Reliability Standard requirement being reviewed in an ongoing Standards Development Project?

The application of this criterion involves determining whether the requirement proposed for retirement or modification is part of an active Standards Development Project, with consideration for the status of the project. If the requirement has been approved by Registered Ballot Body and is scheduled to be presented to the NERC Board of Trustees, in most cases it will not need to be addressed in the five-year review. The exception would be a requirement, such as the Critical Information Protection ("CIP") requirements for Version 3 and 4, that is not due to be retired for an extended period of time. Also, for informational purposes, whether the requirement is included in a future or pending Standards Development Project should be identified and discussed.

C3. What is the VRF of the Reliability Standard requirement?

The application of this criterion involves identifying the VRF of the requirement proposed for retirement or modification, with particular consideration of any requirement that has been assigned as having a Medium or High VRF. Also, the fact that a requirement has a Lower VRF is not dispositive that



it qualifies for retirement or modification. In this regard, Criterion C3 is considered in light of Criterion C5 (Reliability Principles) and C6 (Defense in Depth) to ensure that no reliability gap would be created by the retirement or modification of the Lower VRF requirement. For example, no requirement, including a Lower VRF requirement, should be retired or modified if doing so would harm the effectiveness of a larger scheme of requirements that are purposely designed to protect the reliable operation of the BES.

C4. In which tier of the most recent Actively Monitored List (AML) does the Reliability Standard requirement fall?

The application of this criterion involves identifying whether the requirement proposed for retirement or modification is on the most recent AML, with particular consideration for any requirement in the first tier of the AML.

C5. Is there a possible negative impact on NERC's published and posted reliability principles? The application of this criterion involves consideration of the eight following reliability principles published on the NERC webpage.

Reliability Principles

NERC Reliability Standards are based on certain reliability principles that define the foundation of reliability for North American bulk power systems. Each reliability standard shall enable or support one or more of the reliability principles, thereby ensuring that each standard serves a purpose in support of reliability of the North American bulk power systems. Each reliability standard shall also be consistent with all of the reliability principles, thereby ensuring that no standard undermines reliability through an unintended consequence.

Principle 1. Interconnected bulk power systems shall be planned and operated in a coordinated manner to perform reliably under normal and abnormal conditions as defined in the NERC Standards.

Principle 2. The frequency and voltage of interconnected bulk power systems shall be controlled within defined limits through the balancing of real and reactive power supply and demand.

Principle 3. Information necessary for the planning and operation of interconnected bulk power systems shall be made available to those entities responsible for planning and operating the systems reliably.

Principle 4. Plans for emergency operation and system restoration of interconnected bulk power systems shall be developed, coordinated, maintained, and implemented.



Principle 5. Facilities for communication, monitoring, and control shall be provided, used, and maintained for the reliability of interconnected bulk power systems.

Principle 6. Personnel responsible for planning and operating interconnected bulk power systems shall be trained, qualified, and have the responsibility and authority to implement actions.

Principle 7. The reliability of the interconnected bulk power systems shall be assessed, monitored, and maintained on a wide-area basis.

Principle 8. Bulk power systems shall be protected from malicious physical or cyber attacks. (footnote omitted).

C6. Is there any negative impact on the defense in depth protection of the BES?

The application of this criterion considers whether the requirement proposed for retirement or modification is part of a defense in depth protection strategy. In order words, the assessment is to verify whether other requirements rely on the requirement proposed for retirement or modification to protect the BES.

C7. Does the retirement or modification promote results or performance based Reliability Standards?

The application of this criterion considers whether the requirement, if retired or modified, will promote the initiative to implement results- and/or performance-based Reliability Standards.