

Unofficial Comment Form for 3rd Draft of FAC-003-2 Transmission Vegetation Management — Part of Project 2007-07 Vegetation Management

Please **DO NOT** use this form to submit comments. Please use the [form](#) located at the site below to submit comments on the 3rd Draft of FAC-003-2 Transmission Vegetation Management. Comments must be submitted by **March 31, 2010**

[://www.nerc.com/filez/standards/Vegetation-Management_Project_2007-7.html](http://www.nerc.com/filez/standards/Vegetation-Management_Project_2007-7.html)

If you have questions please contact Harry Tom at [.Tom@nerc.net](mailto:Tom@nerc.net) or by telephone at (860) 550-4157.

Background Information

The purpose of Project 2007-07 Vegetation Management is to:

- Assist in providing an adequate level of reliability for the North American electric Transmission System by verifying that the FAC-003-2 Transmission Vegetation Management standard is complete and that its requirements are set at an appropriate level to ensure reliability.
- Incorporate other general improvements described in the Standard Review Guidelines to bring FAC-003-2 Transmission Vegetation Management into conformance with the latest version of the Reliability Standards Development Procedure and the ERO Sanctions Guidelines.
- Consider comments received from ERO regulatory authorities and stakeholders on FAC-003-1 Transmission Vegetation Management as noted in the NERC Standards Issues Database.
- Satisfy the requirement for review of FAC-003-2 Transmission Vegetation Management within five-year review cycle.

In addition, on January 14, 2010, the NERC Standards Committee endorsed the use of Project 2007-07 Vegetation Management as the prototype for the proof-of-concept for using the results-based criteria for developing a reliability standard. The results-based initiative is intended to focus the collective effort of NERC and industry participants on improving the clarity and quality of NERC reliability standards by developing performance-based, risk-based and competency-based requirements that accomplish a reliability objective through a defense-in-depth strategy, while eliminating documentation-driven requirements that do not have an impact on bulk power system reliability.

The Standards Committee also directed the standard drafting team for Project 2007-07 Vegetation Management to do so with a target for final industry ballot of draft FAC-003-2 Transmission Vegetation Management by August 31, 2010.

The criteria for developing a results-based reliability standard include:

1. Strive to achieve a portfolio of performance-based, risk-based, and competency-based mandatory reliability requirements that provide an effective defense-in-depth strategy for achieving an adequate level of reliability of the bulk power system.
 - a) **Performance-based** — defines a particular reliability objective or outcome to be achieved. In its simplest form, a results-based requirement has four

Unofficial Comment Form for 3rd Draft of FAC-003-2 — Project 2007-07 Vegetation Management

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 capability an entity needs to have to demonstrate it is able to perform its designated reliability functions.
2. The defense-in-depth strategy for reliability standards development should recognize that each requirement in a NERC reliability standard has a role in preventing system failures, and that these roles are complementary and reinforcing. Reliability standards should not be viewed as a body of unrelated requirements, but rather should be viewed as part of a portfolio of requirements designed to achieve an overall defense-in-depth strategy and comport with the quality objectives of a reliability standard.
 3. Each requirement should identify a clear and measurable expected outcome, such as: i) a stated level of reliability performance, ii) a reduction in a specified reliability risk, or iii) a necessary competency.
 4. Strive to minimize prescriptive, administrative (document something), and commercial requirements within the set of NERC reliability standards (i.e., these types of requirements are permissible in standards but should be the exception rather than the rule).
 5. A requirement should not prescribe commercial business practices which do not contribute directly to reliability.

The Vegetation Management Standard Drafting Team worked with Ivy Hooks of Compliance Automation, Inc. to apply the “results-based” approach to developing requirements that are clear and enforceable. Ivy is the CEO of Compliance Automation and has shared a wealth of knowledge and expertise with the drafting team. The “look and feel” of the proposed standard contains much more information than we have been including in previous standards, thus the look and feel of the draft FAC-003-2 Transmission Vegetation Management standard is quite different from the look of our existing standards. One of the more obvious changes is the addition of information to aid end users in reading the requirements from a common understanding of the standard’s objective and the rationale for including each requirement. During the Three-year Performance Assessment, stakeholders indicated that they wanted more information to assist in applying standards – and the additional details provided in the proposed Vegetation Management standard provide an example of one way to fill that void.

On February 11, 2010 the Standards Committee authorized the standard drafting team for Project 2007-07 Vegetation Management to take the following actions relative to the development of draft FAC-003-2 Transmission Vegetation Management:

- Discontinue work in developing a complete Consideration of Comments Report for the comments received in response to the posting of the second draft of the draft FAC-003-2 Transmission Vegetation Management standard that was posted in August 2009; however, post the comments received along with a summary of the actions taken by the team in response to those comments but without an individual response to each comment provided.

Unofficial Comment Form for 3rd Draft of FAC-003-2 — Project 2007-07 Vegetation Management

- Use informal comment periods to collect comments on future “drafts” of the standard, post the comments received during the informal comment periods along with a summary of how the team used the comments received and a redline version of the standard showing the changes made based on the comments received.
- Conduct a 45-day formal comment period in parallel with the formation of the ballot pool and the initial ballot of the standard; post the comments from the formal comment period as they are received for at least the first 30 days of the comment period.
- Use a standard template that is different from the template stipulated in the Reliability Standard Development Procedure as provided by the Standards Committee’s Process Subcommittee.

With respect to the first bullet above regarding stakeholder comments submitted in response to the posting of the second draft of the proposed standard, the SDT has posted a general summary response to the comments on the draft which was posted in August, 2009. However, the limited response does not mean that the SDT ignored the comments received in August 2009. The SDT carefully considered those comments and made modifications to the standard based on the comments received. A summary of the SDT considerations has been posted on the NERC website in lieu of a full Consideration of Comments Report.

A subset of comments received during the August 2009 posting suggested that the STD for this project (Project 2007-07 Vegetation Management) address the recommendations in the Final Report from the Ad Hoc Group for Generator Requirements at the Transmission Interface that pertain to FAC-003-1 Transmission Vegetation Management. The SDT for this project respectfully declined to address the referenced recommendations primarily for the following reasons:

- Project 2010-07 Transmission Requirements at the Generator Interface has been established to address the recommendations in the Final Report from the Ad Hoc Group for Generator Requirements at the Transmission Interface.
- The referenced recommendations are outside the scope of the Standard Authorization Request for this project (Project 2007-07 Vegetation Management).
- The appointed SDT does not have the proper representation to address the referenced recommendations.

Significant modifications incorporated into this draft of FAC-003-2 Transmission Vegetation Management include:

- Two new sections have been added: Background and Guideline and Technical Basis. While the titles are self-evident, the SDT would like to point out that this information was previously included for review in the Technical Reference (aka, White Paper).
- A “global” Force Majeure statement was added to the Applicability section of the standard in response to comments received. This statement is included at the front of the standard and thus is applicable to all Requirements. This “exclusion language” was included in a footnote in the prior version of the standard.
- The wording relating to expected conductor positions was modified. The previous draft of the standard referred to “operating within Rating under normal conditions” and/or “sag and sway”. With this draft, and in response to comments received on this issue, the wording was changed, to state “operating within Rating under Rated Electrical Operating Conditions”. This modification uses standard NERC glossary

Unofficial Comment Form for 3rd Draft of FAC-003-2 — Project 2007-07 Vegetation Management

terms to indicate the expectation that vegetation management should account for line operation as designed but not, for example, for overloaded conditions or excessive wind speeds.

With respect to the format of the draft FAC-003-2 Transmission Vegetation Management standard currently posted for informal comment, the NERC Standards Committee's Process Subcommittee (SCPS) has developed a proposed standard template for use by the standard drafting team for Project 2007-07 Vegetation Management. The proposed template is intended to meet the following key objectives:

1. Depicting the basic criteria for writing standard requirements that meet the Results-Based Reliability Standards concepts;
2. Having one Section that contains only the reliability requirements and associated measures;
3. Moving the administrative and compliance information that is not required for reliability into different sections so that there are "homes" for these materials;

In addition, the new template contains the following features/changes:

1. Allowing insertion of explanatory text to help readers better understand the basis of the definitions and requirements;
2. Moving the standard development timeline (previously called roadmap), revision history and effective date(s) up front before the Introduction Section;
3. Grouping Requirements and their corresponding Measures together;
4. Grouping VRFs, Time Horizons and VSLs - all of which are used only in the determination of a penalty or sanction - together in a table while leaving the requirements and measures free of any of the compliance elements.

The following questions will assist the SDT in finalizing the development of FAC-003-2 Transmission Vegetation Management and will also assist the Standards Committee's Process Subcommittee in refining the proposed standard template. For questions where you agree with indicated statement, please state that you agree and if able, please provide supporting documentation. If you disagree with the statement, please explain why you disagree and provide a rationale to support your position. We would appreciate responses to as many of the following questions as possible.

1. In response to comments received regarding potential for "double jeopardy" and to provide differentiation between transmission lines designated as having IROLs and Major WECC transfer paths from those that are not, the SDT consolidated requirements R4 through R8 found in the August 2009 draft of FAC-003-2 into two requirements in the latest draft of FAC-003-2 (new requirements R1 and R2). Do you agree? Please explain.

Yes

No

Comments:

1. NSRS agrees with the revisions that the drafting team has made and agrees with the combining of four requirements into two. NSRS prefers the MVCD methodology to the minimum clearance distance methodology due to the fact that there is only one measurement to contend with versus two.

Unofficial Comment Form for 3rd Draft of FAC-003-2 — Project 2007-07 Vegetation Management

2. If a company has a line with a standing IROL could they be found in violation of both the requirements R1 and R2? If so, the NSRS recommends combining R1 and R2.

3. Please clarify the need for R1 and R2. Why were lines with IROL separated out from lines without IROLs?

2. The results-based reliability standard criteria focus on striving to achieve a portfolio of performance-based, risk-based, and competency-based mandatory reliability requirements that provide an effective defense-in-depth strategy for achieving an adequate level of reliability of the bulk power system in lieu of prescriptive requirements. Consequently, the SDT revised R1 and its subparts found in the August 2009 draft of FAC-003-2 in favor of the text in the latest draft of FAC-003-2 (new requirement R3). Do you agree? Please explain.

Yes

No

Comments:

1. NSRS agrees with the revisions to R3. With regard to operations within Ratings and Rated Conditions, are operations after a contingency considered to be within Ratings and Rated Conditions?

2. Could wording be added to R3 to specify rated conditions include National Electric Safety Code conditions or assumptions?

3. Do you agree with the overall layout of the proposed template? If not, please suggest an alternative layout.

Yes

No

Comments: N/A

4. Do you agree with grouping the standard development timeline (previously called roadmap) with the revision history, and the effective date(s) and putting this administrative information up front before the Introduction Section? Please explain.

Yes

No

Comments: The NSRS likes the way the standards is now formatted and finds it more user friendly.

5. Do you agree with grouping the Requirements and Measures together, in one Section now called Requirements and Measures? Please explain.

Yes

No

Comments:

NSRS prefers to have the requirements, measures, VRFs, VSLs and Time Horizons together instead of referencing to another page or part of the standard.

6. Do you agree with grouping VRFs, Time Horizons and VSLs together, and putting them in a table separate from the Requirements and Measures Section? Please explain.

Unofficial Comment Form for 3rd Draft of FAC-003-2 — Project 2007-07 Vegetation Management

Yes

No

Comments: Again it is good to have this information together in place of referencing some other page or part of the Standard.

7. Do you agree with the insertion of text boxes, where necessary, to help readers better understand the basis of the Definitions and Requirements? Please explain.

Yes

No

Comments:

1. We agree. The rationale boxes will cut down on interpretations.

2. Are the rationale boxes part of the approved standards for which registered entities will be audited. Are the rationale boxes federal law?

3. Under R3, a reference to the National Electric Safety Code in the rationale box would be helpful. (The goal is to verify that utilities will not be held in violation of this standard when operating beyond the NESC conditions.)

8. Do you agree with the addition of a Guideline and Technical Basis Section to place technical materials and other related information that assists entities in understanding how to comply with the standard but does not contain mandatory actions/activities? Please explain.

Yes

No

Comments:

Another good addition to the standard and will help clarify parts of the standard without referring to another document or set of guidelines.

9. Do you prefer putting URL links to reference materials in the Guideline and Technical Basis Section, or do you prefer putting the additional technical/information materials in appendices, where needed, to supplement the Guideline and Technical Basis Sections? Please explain.

Prefer the inclusion of URL links

Prefer appendices

Comments:

If there is background information contained in a URL link pertaining to a particular Requirement, that link should be with the Requirement that it pertains to.

10. Do you agree with the addition of the Background Section to allow provision of background information, and to elaborate on the reliability-related drivers for the standard/change? Please explain.

Yes

No

Comments: N/A

Unofficial Comment Form for 3rd Draft of FAC-003-2 — Project 2007-07 Vegetation Management

11. Do you agree with the addition of an Administrative Procedure Section to place administrative/procedural requirements that are contained in the existing standards but which do not meet the results-based or risk-based criteria? Please explain.

Yes

No

Comments: N/A

12. Is there any other information that should be included in the standard document? If so, please explain why you feel that this information should be included.

Yes

No

Comments:

The NSRS believes a section for definitions and abbreviated terms such as, Active ROW, MVCD, and WECC is needed. Also, See comment above in Question 9 on URL links.

13. Do you have any other comment regarding the draft FAC-003-2 Transmission Vegetation Management standard that have not been addressed above? If yes, please provide a reference to the section, requirement, or subrequirement that you believe should be changed, added or deleted and the rationale for your proposal.

Yes

No

Comments:

1. Need definition for the phrase "Major WECC Transfer Paths".

2. In question 2 of the comment form, it refers to the "bulk power system." This standard does not cover the bulk power system, it covers lines above 200kV and certain ones below 200kV.