

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

**Revisions to Reliability Standard for
Transmission Vegetation Management**)
)

Docket No. RM12-4-000

**COMMENTS OF THE
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION
IN RESPONSE TO NOTICE OF PROPOSED RULEMAKING**

The North American Electric Reliability Corporation (“NERC”) hereby provides these comments on the Notice of Proposed Rulemaking (“NOPR”) regarding NERC’s proposed Reliability Standard FAC-003-2 (Transmission Vegetation Management)¹ issued by the Federal Energy Regulatory Commission (“FERC” or “Commission”) in this proceeding on October 18, 2012.² NERC provides these comments as the Commission-certified³ electric reliability organization (“ERO”) responsible for the development and enforcement of mandatory Reliability Standards, including proposed FAC-003-2.

In the NOPR, the Commission proposes to approve Reliability Standard FAC-003-2, which modifies the currently-effective Reliability Standard, FAC-003-1. The Commission also proposes to approve changes in the definition of “Right-of-Way” and “Vegetation Inspection,” the addition of the term “Minimum Vegetation Clearance Distance” (“MVCD”), the implementation plan for proposed FAC-003-2, and the Violation Severity Levels associated with the proposed Reliability Standard. Finally, the Commission proposes to direct NERC to revise

¹ See NERC Dec. 21, 2011 Petition for Approval of Proposed Reliability Standard FAC-003-2 – Transmission Vegetation Management (“Petition”).

² *Revisions to Reliability Standard for Transmission Vegetation Management*, Notice of Proposed Rulemaking, 141 FERC ¶ 61,046 (2012).

³ *North American Electric Reliability Corp.*, 116 FERC ¶ 61,062, *order on reh’g and compliance*, 117 FERC ¶ 61,126 (2006), *aff’d sub nom. Alcoa Inc. v. FERC*, 564 F.3d 1342 (D.C. Cir. 2009).

the Violation Risk Factor for Requirement R2, and approve the remainder of the Violation Risk Factors. In response to the Commission's request for comments, NERC addresses several sections of the NOPR, as further discussed below. NERC respectfully requests that the Commission carefully consider the issues raised and approve the proposed Reliability Standard as filed. For ease of reference, excerpts from the Commission's NOPR appear below.

I. Notices and Communications

Notices and communications with respect to this filing may be addressed to:⁴

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II. Proposal to Approve FAC-003-2

NERC supports the Commission's proposal to approve the proposed Reliability Standard. FAC-003-2 represents a significant step in transmission vegetation management. The proposed FAC-003-2 Reliability Standard maintains a reliable electric transmission system using a defense-in-depth strategy to manage vegetation located on transmission Rights-of-Way and by minimizing encroachments from vegetation located adjacent to the Rights-of-Way and within the

⁴ Persons to be included on the Commission's service list are indicated with an asterisk. NERC requests waiver of 18 C.F.R. § 385.203(b) to permit the inclusion of more than two people on the service list.

Transmission Owner’s control, thus preventing the risk of those vegetation-related outages that could lead to a Sustained Outage.⁵ Additionally, the proposed FAC-003-2 standard would enhance reliability by improving enforceability of the FAC-003 Reliability Standard, as compared to FAC-003-1. As the Commission states in its NOPR, proposed standard FAC-003-2 is an improvement over the currently-effective Version 1 standard and will support vegetation management practices that can effectively protect against vegetation-related transmission outages.⁶ NERC also recognizes the Commission’s statement in the NOPR that it gives due weight to NERC’s technical expertise in considering whether to approve proposed Reliability Standard FAC-003-2. NERC requests that the Commission continue to give “due weight” to NERC’s technical expertise and approve the proposed Reliability Standard as filed.⁷

III. Applicability

A. Information on IROL Status

In paragraph 64 of the NOPR, the Commission seeks a better understanding of how proposed FAC-003-2 will be applied to facilities designated as Interconnection Reliability Operating Limits (IROLs).⁸ Specifically, the Commission explains:

P 64. While we view the modified applicability as a significant improvement, there are two aspects on which we seek comment. First, section 4.2.2 of proposed FAC-003-2 provides that the standard applies to overhead transmission lines operated below 200

⁵ Section C.1.4 of the proposed FAC-003-2 standard lists seven types of outages that would be categorized as “Sustained Outages.”

⁶ NOPR at P 57.

⁷ Because a NOPR is not a final action, and the Commission continues to have the option to direct changes under section 215(d)(5) in its final rule, arguments that the Commission has failed to give due weight to NERC’s technical expertise are not yet moot. The Commission’s obligation under section 215(d)(2) of the Federal Power Act (“FPA”), 16 U.S.C. § 824o(d)(2) (2006), continues beyond an initial proposal to approve or remand a proposed or modified Reliability Standard and until the issuance of a final rule or order on the merits of NERC’s Petition.

⁸ An IROL is defined as “[a] System Operating Limit that, if violated, could lead to instability, uncontrolled separation, or Cascading outages that adversely impact the reliability of the Bulk Electric System.” NERC defines “System Operating Limit” as “[t]he value (such as MW, MVar, Amperes, Frequency or Volts) that satisfies the most limiting of the prescribed operating criteria for a specified system configuration to ensure operation within acceptable reliability criteria.” *See* NERC Glossary of Terms Used in Reliability Standards (“NERC Glossary”) at 26, 48.

kV identified as an IROL under NERC Standard FAC-014 by the planning coordinator. However, FAC-014-2 does not explicitly require the planning coordinator to provide information about IROL status to transmission owners. Further, IROLs may change with changing system conditions. Given these factors, we seek a better understanding of how FAC-003-2 will be applied to facilities designated as IROLs. For example, we seek comment on how information regarding IROL status will be transmitted to transmission owners that must comply with FAC-003-2 and how transmission owners can effectively implement vegetation management per FAC-003-2 given that such programs are generally implemented annually and a change in IROL status can take place at any time given changing system conditions.⁹⁴

⁹⁴ For example, if a line is designated to be an IROL element by the planning coordinator, how will the transmission owner know to thereafter apply FAC-003-2 to that line? If the designation of an IROL changes with changes in system conditions, how will a transmission owner document management of vegetation over time?

Section 4.2.2 of proposed FAC-003-2 relies on identification of IROLs by the Planning Coordinator to determine the applicability of proposed FAC-003-2 to certain transmission lines operated below 200 kV. The Planning Coordinator identifies IROLs per FAC-014⁹ using its methodology developed in FAC-010.¹⁰ Additionally, TPL-001, Requirement R6 requires the Planning Coordinator to define and document, within its Planning Assessment, the criteria or methodology used in the analysis to identify IROL system conditions (*i.e.* Cascading, voltage instability, or uncontrolled islanding), which are then used in its Planning Assessments.

The technical reference document for proposed FAC-003-2 explains the approach taken in proposed FAC-003-2 to rely on FAC-014 for identification of IROLs. Proposed FAC-003-2 relies on the identification of IROLs by the Planning Coordinator. FAC-014 requires Reliability Coordinators, Planning Coordinators, and Transmission Planners to have a methodology to identify all lines that might comprise an IROL. Thus, Planning Coordinators are able to identify sub-200 kV lines that qualify as part of an IROL and should be subject to proposed FAC-003-2.

⁹ See FAC-014, Requirement R3.

¹⁰ See FAC-010, Requirements R1-R5.

This would include identifying any changes in the status of a line if a line's IROL status changes given changing system conditions.¹¹

In an early version of the proposed Reliability Standard, the standard drafting team developed a draft Requirement for the preparation of a list of sub-200 kV transmission lines by the Planning Coordinator. This draft Requirement was deleted in part because some commenters noted that a similar identification of important circuits exists in FAC-014 and as such, this draft Requirement was unnecessary. Others noted ambiguities in the language of the draft Requirement itself. The technical reference document explains that FAC-014, Requirement R5 provides the mechanism for a Transmission Owner to obtain the information needed to comply with proposed FAC-003-2. In FAC-014, the Reliability Coordinator, Planning Authority¹² and Transmission Planner each are required to provide its SOLs and IROLs to entities with a reliability related need, such as a Transmission Owner, who request such information. Transmission Owners have a reliability-related need for IROL information, including changes in that information, due to proposed FAC-003-2. In practice, while a Transmission Owner is developing its annual work plan for vegetation management, the Transmission Owner who does not already have the IROL information would send a request to the Planning Authority for the list of circuits that are associated with the IROLs pursuant to Requirement R5 of FAC-014.

If the Commission does not agree that Transmission Owners can obtain information directly from Planning Coordinators under Requirement R5 of FAC-014, NERC submits that the Transmission Owners still have the means to obtain the information for purposes of complying

¹¹ For changes in the status of the applicability of a line, the proposed standard identifies five special cases. These cases are needed to cover effective dates for individual lines which undergo transitions after the general effective date, including those lines which are initially becoming subject to the standard, those lines which are changing their applicability within the standard, and those lines which are changing in a manner that removes their applicability to the proposed standard.

¹² The term "Planning Authority" included in FAC-014 was replaced in the NERC Functional Model with the term "Planning Coordinator." References to the Planning Authority and Planning Coordinator are synonymous.

with proposed FAC-003-2. First, certain Transmission Owners are also registered as “Transmission Operators” and would already receive the necessary IROL information pursuant to FAC-014. Pursuant to the explicit Sub-Requirements of Requirement R5 in FAC-014, the Transmission Operator would already know the IROLs it may develop (*see* Requirement R5.2) and receive IROL information from the Reliability Coordinator (*see* Requirement R5.1), the Planning Authority (*see* Requirement R5.3), and the Transmission Planner (*see* Requirement R5.4) directly upon request. Therefore, Transmission Owners also registered as Transmission Operators would have access to the Planning Coordinator’s IROL information pursuant to Requirement R5.3 of FAC-014. As of December 10, 2012, the NERC registry shows that nearly half of the total Transmission Owners are also registered as Transmission Operators.

Transmission Owners who are not also registered as Transmission Operators must have transferred their Transmission Operator compliance responsibilities by written agreement.¹³ Generally these agreements permit or require sharing of reliability and operational information needed to comply with proposed FAC-003 via FAC-014 Requirement R5.3.

As an example, in NYISO’s form agreement for Transmission Owners posted on its public website, Transmission Owners are required under Section 2.02 to operate and maintain its facilities in accordance with all Reliability Rules.¹⁴ NYISO is required, under Section 2.10 to provide “the necessary information and support services to comply with their obligations.”¹⁵

As an additional communication method for identifying IROLs, Requirement R8 of TPL-001-2 requires each Planning Coordinator and Transmission Planner to distribute its Planning

¹³ In Appendix 5b to the NERC Rules of Procedure, section III(d)(1) and III(d)(2) of Appendix 5b states that “[a] Transmission Owner/Operator will not be registered based on these criteria if responsibilities for compliance with approved NERC Reliability Standards or associated Requirements including reporting have been transferred by written agreement to another entity that has registered for the appropriate function for the transferred responsibilities, Transmission Owner/Operator.”

¹⁴ *See* NYISO Transmission Owner Agreement, *available at*

http://www.nyiso.com/public/webdocs/documents/regulatory/agreements/nyiso_agreement/nyiso_to_agreement.pdf.

¹⁵ *Id.*

Assessment results to adjacent Planning Coordinators and adjacent Transmission Planners and to *any functional entity that has a reliability related need and submits a written request for the information* within 30 days of such a request. A Transmission Owner responsible for compliance with the proposed FAC-003 Reliability Standard would qualify as a “functional entity” with a legitimate reliability need and be eligible to request its Planning Assessment.

The Commission also asks in footnote 94 how entities will document management of vegetation over time if the designation of an IROL changes. FAC-003-2 requires Transmission Owners to have evidence that they managed vegetation to prevent encroachment into the MVCD as described in Requirement R1. The proposed Reliability Standard properly declines to prejudge how an entity will document its management activities, but it is clear that it must be done. This will be evaluated through the compliance monitoring and enforcement program. While the burden is on the Transmission Owner to procure the information needed to identify lines subject to Requirement R1, NERC argues that this burden is proper since the Transmission Owner is the entity responsible for implementing proposed FAC-003-2 and maintaining the transmission line.

B. Order No. 693, P 65 Directive

The Commission also seeks comment on whether proposed FAC-003-2 ensures that the standard covers “lines that have an impact on reliability” in compliance with the Commission’s Order No. 693 directive to expand the applicability of the Reliability Standard. In its NOPR, the Commission states:

P 65. Second, in Order No. 693, the Commission directed that the proposed Reliability Standard apply to “Bulk-Power System transmission lines that have an impact on reliability as determined by the ERO.” The Commission noted evidence that some lines below 200 kV can have significant impacts on the Bulk-Power System, including IROLs and System Operating Limits (SOLs).

The Commission directed the ERO, however, to balance extending the applicability of the standard against unreasonably increasing the burden on transmission owners. Thus, we seek comment on how the applicability of the proposed Reliability Standard complies with the directive that the standard cover “lines that have an impact on reliability.”

P 65 (cont’d). In addition, since the issuance of Order No. 693, we note that Commission staff and NERC stated in their joint report on the 2011 Southwest outage that failure to properly designate IROLs was a major cause of the outage. Therefore, as part of the broader inquiry into whether the standard covers “lines that have an impact on reliability,” we seek comment on how NERC will assure that IROLs are properly designated.

In Order No. 693, the Commission directed NERC to “modify the Reliability Standard to apply to Bulk-Power System transmission lines that have an impact on reliability *as determined by the ERO.*”¹⁶ The directive requires a determination by the ERO rather than an objective statement that the revised Reliability Standard cover “lines that have an impact on reliability.” NERC responds that it has properly modified the applicability of the Reliability Standard to cover transmission lines that have an impact on reliability while properly balancing the extension of the applicability of the standard against unreasonably increasing the burden on Transmission Owners.

As in the FAC-003-1 Reliability Standard, proposed FAC-003-2 continues to apply to transmission lines operated at 200 kV or higher. In addition, in response to the Commission directive, proposed FAC-003-2 also applies to critical transmission lines below 200 kV. Rather than employing a bright-line threshold of 100 kV, the applicability for transmission lines below 200 kV has been limited to specific cases where lines are critical to reliability by virtue of their inclusion as elements in the determination of an IROL or as a part of a Major WECC Transfer

¹⁶ *Id.* (emphasis added).

Path.¹⁷ The standard drafting team took this approach to avoid the creation of a generic lower bright-line. By relying on IROL and Major WECC Transfer Path identification as a proxy for reliability importance, the proposed standard uses an impact-based approach for determining applicability. This impact-based approach balances the importance of covering lines that have an impact on reliability without unreasonably increasing the burden on Transmission Owners.

In its NOPR, the Commission asks how NERC will assure that IROLs are properly designated in light of the 2011 Southwest outage. The Arizona-Southern California Outage report provides recommendations for addressing the failure to properly designate IROLs in that outage and efforts are underway to implement those recommendations. With respect to determining compliance with proposed FAC-003-2, NERC and the Regional Entities will continue to enforce the FAC-014-2 and FAC-010-2.1 Reliability Standards to ensure Planning Coordinators are identifying IROLs using their developed methodology.

IV. Requirements R1 and R2

A. Minimum Clearance Values

The Commission also seeks comment on the status of industry research regarding testing or analysis of flashover events. In addition, the Commission seeks comment on a proposal to direct NERC to conduct confirmatory empirical research to confirm the MVCD values in proposed FAC-003-2. The Commission's states in the NOPR:

P 72. Notwithstanding our approval of the proposed MVCD, we remain concerned, as indicated in Order No. 693, over the lack of empirical data with regard to actual flashover distances observed through testing or analysis of flashover events. NERC states in its petition that the Electric Power Research Institute (EPRI) is planning to undertake “the first known field tests of energized high voltage conductor flash-over to vegetation” at its Lenox facility,

¹⁷ WECC maintains a listing of Major WECC Transfer Paths available on its website, *available at* <http://www.wecc.biz/Standards/Approved%20Standards/Supporting%20Tables/Table%20Major%20Paths%204-28-08.pdf>.

and that EPRI could be ready to commence such testing by the summer of 2013. We seek comment on the status of this project and any other similar testing that is planned or ongoing of which NERC or other commenters are aware.

P 73. While we accept NERC's approach to determine the MVCDs between conductors and vegetation needed to prevent flashovers, we believe it is important that NERC develop empirical evidence that either confirms the MVCD values or gives reason to revisit the Reliability Standard. Accordingly, consistent with the activity that NERC has already initiated, the Commission proposes to direct that NERC conduct or commission testing to obtain empirical data and submit a report to the Commission providing the results of the testing. We seek comment on this proposal, as well as the appropriate time frame for completion of the required testing and the submission of a report.

At this time, NERC does not have an update to provide to the Commission with additional information on the status of EPRI's or other similar testing that is planned or ongoing. As to the development of confirmatory empirical data as noted in the NOPR, given the uncertainty in timing, funding, design, scope, and execution of such a study described below, NERC offers the following alternative to a Commission directive. Because the Commission is proposing to approve the proposed FAC-003-2 Reliability Standard, including its proposed MVCD values, NERC asks that the Commission refrain from issuing a directive and instead accept NERC's commitment to work with the Commission and other entities or groups to determine whether and how a study could be conducted to obtain the empirical data the Commission seeks and to evaluate whether there is reason to revisit the Reliability Standard. This alternative would allow NERC the flexibility to pursue additional discussion with the Commission on scoping and funding and allow for the development of possible partnerships in conducting the study. This approach would also allow Commission staff, NERC, and the industry to collaborate on the study and also on any necessary changes to the proposed Reliability Standard. Such a collaborative effort would also reduce the future need for additional

studies. Accordingly, if the Commission concludes confirmatory empirical data is necessary, NERC requests the Commission to accept NERC's proposed approach in lieu of a directive.

If the Commission issues a directive to NERC to conduct the empirical research, NERC requests the Commission to provide additional guidance with respect to the following three concerns: (1) the need for the empirical data and the scope of a study; (2) time frame for the study; and (3) funding of the study. NERC also requests that the Commission tailor any directive to allow NERC flexibility regarding timing, study design, study scope, and funding.

First, the Commission states in the NOPR that it believes it is important that NERC develop this empirical evidence, but does not provide details on why confirmatory research is necessary in light of its support for the proposed Reliability Standard and its statements that NERC has supported its use of the MVCD values. NERC requests that the Commission explain the need for the confirmatory research to aid NERC, or a commissioned entity, in the study design. This information would be critical in developing a study to verify the MVCD values and specifically in determining what data is needed to address the areas in which the Commission sees a lack of supporting empirical data for the MVCD values in proposed FAC-003-2.

NERC seeks guidance from the Commission on what type of information is envisioned when it refers to "empirical data." This would help ensure that the study produces the types of necessary data the Commission needs. The type of empirical data the Commission needs would also largely affect the cost of any study. For example, if the study required testing of actual observed flashover in a controlled environment, the cost could be significant and the study could require multiple years to complete. If the study would collect and analyze contacts annually or over a span of years, the cost would be less and still provide useful data.¹⁸

¹⁸ For example, NERC already creates a quarterly Vegetation-Related Transmission Outage Report that provides a summary of the vegetation outages that occurred by voltage class and category. *See, e.g.* NERC

Second, NERC cannot provide an estimate, with any accuracy, on the time it may take to comply with a Commission directive. If directed to conduct the study, NERC requests that it be allowed to submit a proposed time schedule for completion once NERC has an opportunity to determine the time needed to properly design the study, budget for the study, conduct the testing, process the results, compile a report, and file with the Commission.

Third, supplemental funding would be required to complete the study. The Commission should make clear that funding would be provided. The Commission's regulations require the ERO to file its proposed entire annual budget for statutory and non-statutory activities with the Commission 130 days before the beginning of the ERO's fiscal year. The budget for fiscal year 2013 has already been submitted and approved by the Commission.¹⁹ NERC does not currently have the necessary budget to undertake confirmatory research that could be required to confirm the MVCD values. Therefore, NERC asks the Commission to address funding of such a directive and allow for time to seek necessary Commission approval for supplemental funding. Prior to any budget request, NERC would need to have an accurate estimate of the cost of the proposed study, which would take time and resources to design.

B. Designation of a Medium Violation Risk Factor for Requirement R2

The Commission states in the NOPR that NERC has not supported a "medium" Violation Risk Factor designation for Requirement R2 and provides an opportunity for NERC to provide additional explanation. The NOPR explains:

P 77. Based on the information provided in NERC's Petition, it is not clear that NERC has adequately supported a medium Violation Risk Factor designation for Requirement R2. ... NERC's support for the medium designation is that transmission lines that are not IROLs and are not Major WECC Transfer Paths "have less

Vegetation-Related Transmission Outage Fourth Quarter 2011 Report, *available at* http://www.nerc.com/files/4Q2011_Vegetation%20Report%20_Updated%20FINAL.pdf .

¹⁹ *North American Electric Reliability Corp.*, 141 FERC ¶ 61,086 (2012).

potential for leading to cascading, separation, or instability” than lines that are IROLs or Major WECC Transfer Paths. But NERC does not explain *why* outages on these relatively high voltage lines (200 kV or higher) would not likely lead to cascading, separation, or instability, or provide any indication of the number of transmission lines and transmission line-miles that would now be subject to a reduced (i.e., medium) Violation Risk Factor designation if FAC-003-2 were in effect.

P 81. Accordingly, pursuant to our Violation Risk Factor guidelines, which require, among other things, consistency within a Reliability Standard (guideline 2) and consistency between requirements that have similar reliability objectives (guideline 3), we propose to modify the Violation Risk Factor assigned to Requirement R2 from medium to high. However, in its comments on this NOPR, NERC is free to provide additional explanation than provided thus far to demonstrate the lines identified in Requirement R2 are properly assigned a medium Violation Risk Factor.

NERC does not have additional information beyond the information supplied in its petition for the Violation Risk Factor set for Requirement R2. NERC submits that the “medium” designation is appropriate and aligns with the Commission-approved definitions for Violation Risk Factors and complies with the Commission’s guidelines regarding the establishment of these values. The separation of applicability (between R1 and R2) recognizes that inadequate vegetation management for an applicable line that is an element of an IROL or Major WECC Transfer Path is a greater risk to the interconnected electric transmission system than applicable lines that are not an element of an IROL or a Major WECC Transfer Path. Applicable lines that are not an element of an IROL or Major WECC Transfer Path do require effective vegetation management, but these lines are comparatively less operationally significant.

C. Enforceability

a. Consolidation of Reference Material

In its NOPR, the Commission asks whether the information that NERC has provided in its Petition, in the Guideline and Technical Basis document that is attached as part of Exhibit A to the Petition, and in its May 25, 2012 responses to the Commission staff's data requests should be consolidated as reference material. The NOPR reads:

P 91. We seek comment as to whether this material should be consolidated as reference material to complement the proposed compliance measures in order that entities that must comply can find these materials in one place and assure implementation of the proposed standard as NERC has supported in its filings.

NERC does not object to consolidating the information as reference material and posting it on its website along with proposed FAC-003-2 prior to implementation.

b. Communication Delay

In its NOPR, the Commission seeks comment on how NERC would treat certain delays in communication. The Commission states:

P 92. In addition, Requirement R4 requires transmission owners to notify “without [any][sic] intentional time delay” the control center with switching authority for the applicable line when the transmission owner has confirmed the existence of a vegetation condition that is likely to cause an imminent fault. We seek comment on how NERC would or should treat a delay in communication caused by the negligence of the transmission owner or one of its employees, where the delay may be significant and “unintentional.”

NERC responds that the ultimate treatment of a delay by a Compliance Enforcement Authority would take into account the specific facts and circumstances underlying the issue and must be determined on a case-by-case basis. However, the expectation in Requirement R4 is that once a Transmission Owner has confirmed the existence of a vegetation condition that is likely to cause an imminent fault, the Transmission Owner must immediately notify the control center.

The standard drafting team did not include a quantitative time element for notification in Requirement R4 due to the difficulty in determining one time period that applies to all cases. The proposed FAC-003-2 technical reference document offers examples of acceptable unintentional delays, such as certain limited communication system problems, delays due to the location of crews in remote areas with no communication access, or delays due to severe weather. However, NERC again notes that any determination would need to be made on a case-by-case basis.

A. Reporting Requirements

In the NOPR, the Commission asks NERC to identify the courses of action available to it to ensure compliance. The NOPR states:

P 94. However, we seek comment on NERC’s statement regarding the “courses of action” that are available to it in order to ensure compliance, other than notifying the Commission of the entity’s failure to comply.

NERC’s statement was a reiteration of Section 100 of the NERC Rules of Procedure. For ease of reference, excerpts from Section 100 referenced in the Petition are provided below:

Each Bulk Power System owner, operator, and user shall comply with all Rules of Procedure of NERC that are made applicable to such entities by approval pursuant to applicable legislation or regulation, or pursuant to agreement.

Any entity that is unable to comply or that is not in compliance with a NERC Rule of Procedure shall immediately notify NERC in writing, stating the Rule of Procedure of concern and the reason for not being able to comply with the Rule of Procedure.

NERC shall evaluate each case and inform the entity of the results of the evaluation. If NERC determines that a Rule of Procedure has been violated, or cannot practically be complied with, NERC shall notify the Applicable Governmental Authorities and take such other actions as NERC deems appropriate to address the situation.²⁰

²⁰ See NERC Dec. 21, 2011 Petition at 31 (quoting Section 100 of the NERC Rule of Procedure).

As an example of a course of action, Attachment 1 of NERC’s Compliance Monitoring and Enforcement Program found in Appendix 4C of the NERC Rules of Procedure provides a process for non-submittal of requested data. Under this process, if data, information, or other reports requested from a Registered Entity are not received by a date certain, the Compliance Enforcement Authority may apply a Reliability Standard violation at the severe Violation Severity Level.

B. Definitions – Revised Definition of Right-of-Way

a. Transmission Owner Incentive to Narrow Right-of-Way

The Commission also expresses concern in the NOPR regarding a possible incentive for Transmission Owners to narrowly define a Right-of-Way. The Commission explains:

97. However, under proposed Requirements R1.2, R1.3 and R1.4 and the corresponding sub-requirements of R2, fall-ins, blow-ins and grow-ins that cause a sustained outage are violations of the proposed standard only if they occur from *inside* this newly-defined Right-of-Way, which could give transmission owners the perverse incentive to “define” a particular Right-of-Way as narrowly as possible in order to limit the likelihood of an R1 or R2 violation.

As an initial matter, NERC notes that the Commission’s statement in P 97 is partially incorrect with respect to grow-ins. In P 97, the Commission states that “under proposed Requirements R1.2, R1.3 and R1.4 and the corresponding sub-requirements of R2, fall-ins, blow-ins and grow-ins that cause a sustained outage are violations of the proposed standard *only if they occur from inside* this newly-defined Right-of-Way, which could give transmission owners the perverse incentive to ‘define’ a particular Right-of-Way as narrowly as possible in order to limit the likelihood of an R1 or R2 violation.”²¹ Under Requirements R1 and R2, an encroachment due to vegetation *growth* into the MVCD that caused a vegetation-related Sustained Outage,

²¹ NOPR at 97 (emphasis added).

regardless of the defined Right-of-Way, would be a violation of R1 and R2.²² Encroachments due to grow-ins into the MVCD are not tied to the Right-of-Way. However, violations of R1 and R2 due to fall-ins and blow-ins are violations of the proposed standard only if they occur from inside the defined Right-of-Way.

In response to P 97, while NERC understands the Commission's concern, no evidence is currently available or cited to show that this behavior is occurring or would occur. Transmission Owners are accountable for R1 and R2 purposes if the encroachment occurs from outside of the defined "Right-of-Way," but within the Transmission Owner's control. Encroachments into the MVCD observed in real time would be violations of R1 or R2 regardless of whether they cause a Sustained Outage and regardless of whether the vegetation is within the Right-of-Way as defined under proposed FAC-003-2. Encroachments due to vegetation growth into the MVCD also trigger violations of R1 and R2 regardless of the defined Right-of-Way.

For the remaining encroachments due to "fall-ins" or "blow-ins," the Transmission Owner still must have robust vegetation management practices in place and implement them effectively to properly manage danger timber outside of the Right-of-Way, but within the Transmission Owner's control, to ensure no encroachments occur. Otherwise, the Transmission Owner risks violating Requirements R6 and R7 of FAC-003-2, as described in response to P 101 of the NOPR below.

Given the significant cost and public scrutiny of a Sustained Outage, the incentive is there for Transmission Owners to properly set Right-of-Way widths to ensure that the land needed to operate a transmission line is included. This is especially true because the Transmission Owner has an obligation to implement the rigorous defense-in-depth strategy for vegetation management required by proposed FAC-003-2. As discussed in response to P 102 of

²² See Requirements R1 (#4) and R2 (#4) of FAC-003-2.

the NOPR below, in all cases, the width of the Right-of-Way must meet engineering or construction standards pursuant to the definition of Right-of-Way and cannot be arbitrarily set by the Transmission Owner.

b. Fall-in by Danger Timber

In its NOPR, the Commission seeks clarification of one of NERC's statements in its response to the Commission's data request in the proceeding. The Commission states:

P 101. However, we seek further comment on NERC's enforcement approach with respect to a fall-in by "danger timber" (dead, diseased or dying trees or limbs) from within the transmission owner's legally-owned and controlled right-of-way. Specifically, NERC indicates in its data responses (restated in P 98, *supra*) that "if the TO is regularly identifying its danger trees and has a program for managing the risk of fall-in there would be no violation." The Commission's concern is that this statement could be read to mean that, as long as the transmission owner identifies danger trees and has a program to manage the risk of those trees, an encroachment into the MVCD from a location within the transmission owner's control would not be a violation. The Commission would not agree with such a reading. The mere existence of a program to identify danger trees and a program to manage risk should not shield a transmission owner from enforcement if, notwithstanding the existence of the program, an encroachment into the MVCD occurred. The Commission seeks comment on this reading and, based on the comments, will consider whether changes are needed.

In its data request response, NERC explained a series of scenarios where the vegetation is located outside of the Transmission Owner-defined Right-of-Way, but within the Transmission Owner's control.²³ Two of the scenarios discussed fall-in of "danger" timber (dead, diseased or dying) and fall-in from a green, healthy tree from outside of the Right-of-Way, but within the Transmission Owner's control. In its data response, NERC states "if the TO is regularly identifying its danger trees and has a program for managing the risk of fall-in there would be no

²³ NERC May 25, 2012 Data Responses, Response to Q9.

violation.”²⁴ The Commission states that it would not agree with such a reading. NERC offers the following additional explanation to clarify its statement in the data response.

Because there is no practical inspection program or technology capable of identifying which green or “healthy” trees may fall into the MVCD, the Requirements in proposed FAC-003-2 do not require the cutting of green, “healthy” trees. However, because danger timber is identifiable, it is important to incentivize Transmission Owners to have effective vegetation management practices to manage the risk of the danger timber outside of the Right-of-Way, but within the Transmission Owner’s control.²⁵ NERC explained in its data response that if an outage occurs and it is confirmed that the Transmission Owner was not attempting to identify its danger timber risk, the Transmission Owner could be in violation of Requirement R6, which requires a Transmission Owner to perform a Vegetation Inspection of 100% of its applicable transmission lines subject to proposed FAC-003-2. Also, if the Transmission Owner identifies the danger tree, but puts no plan into effect to manage the risk of fall-in, the Transmission Owner could be in violation of R7, which requires a Transmission Owner to complete 100% of its annual vegetation work plan of applicable lines to ensure no vegetation encroachments occur within the MVCD. The same is the case if the Transmission Owner had knowledge of a probable encroachment into the MVCD and did nothing to eliminate the encroachment.

NERC’s statement “if the TO is regularly identifying its danger trees and has a program for managing the risk of fall-in there would be no violation” is accurate so long as the Transmission Owner implements a well-managed and executed vegetation management program as documented under Requirement R3 and as carried out through the risk-based Requirements

²⁴ *Id.*

²⁵ The Transmission Owner’s initial commitment to manage danger timber is measured under Requirement R3, which states that the “Transmission Owner shall have documented maintenance strategies or procedures or processes or specifications it uses to prevent the encroachment of vegetation into the MVCD...”

R6 and R7. The reference to “no violation” in NERC’s explanation pertained to Requirements R6 and R7, but was not intended to convey that mere existence of a program to identify danger trees and a program to manage risk would create a shield from a finding of a violation under Requirements R1 or R2 if an encroachment does occur. Requirements R6 and R7 collectively demonstrate how entities carry out their Requirement R3 documented vegetation management program, and Requirements R1 and R2 ultimately ensure their overall performance success.

c. Defining a Right-of-Way

The Commission also requests comment in the NOPR on how Transmission Owners will use the guidance identified in the definition of Right-of-Way. The Commission states:

102. We also note that the proposed definition of Right-of-Way includes guidance as to how the transmission owner may define its Right-of-Way, requiring that it be based on construction documents, pre-2007 vegetation maintenance records, or as-built blowout standards. We seek comment on how the identified guidance in the new definition will be used: (1) by the transmission owner to establish criteria to determine an appropriate Right-of-Way; and (2) by auditors to establish criteria to determine compliance with the proposed standard.

Prior to answering the two specific questions in P 102, NERC would like clarify that the definition of Right-of-Way requires that the width of the corridor to be established *by engineering or construction standards* as documented in either construction documents, pre-2007 vegetation maintenance records, or by the blowout standard in effect when the line was built. The three types of information identified in the definition are the criteria with which the Transmission Owner would be judged on whether it set the width of the Right-of-Way using sound engineering or construction standards. The Right-of-Way definition is intended to recognize more clearly the establishment of the Right-of-Way through documentation. In all cases, the width of the Right-of-Way must meet engineering or construction standards and

cannot be arbitrarily set by the Transmission Owner. Three types of information have been included in the definition as guidance to base and subsequently to verify that the width of the Right-of-Way has been properly determined.

To determine the width needed to operate a transmission line and define its Right-of-Way to meet engineering or construction standards, Transmission Owners currently calculate the blowout of the line and then add a spark over distance. The Transmission Owner would also consider the land use adjacent to the Right-of-Way and determine whether any additional width is necessary. The revised definition of Right-of-Way would require the width of the Right-of-Way to be based on construction documents, pre-2007 vegetation maintenance records, or as-built blowout standards. Construction documents would show the initial cleared width for the transmission line marked on drawings. Pre-2007 vegetation maintenance records are included in the revised definition so that in absence of a width provided in construction or engineering documents, the width can be set using evidence in maintenance records for a width that was *in fact* maintained prior to the FAC-003 Reliability Standard becoming mandatory. This information could be found in either inspection documents or bid documents for the transmission line.

The “blowout standard” is intended to represent the conductor “blow out” (as opposed to vegetation “blow in”) design criteria used when the line was constructed. This phrase in the definition allows a Transmission Owner to use engineering standards in effect when the line was constructed to determine the Right-of-Way width. From these types of information, the Transmission Owner will be able to determine the width needed to operate a transmission line. The Transmission Owner would not need to create a separate set of criteria to analyze the information from these types of guidance and set the width properly.

Auditors or other compliance monitoring staff will be able to request any supporting information used to set the width of the Right-of-Way and the Transmission Owner's support for its determination, which would need to include any of the available information listed in the definition of Right-of-Way. Auditors will be able to check that the width of the Right-of-Way is set according to engineering or construction standards and based on construction documents, pre-2007 vegetation maintenance records, or as-built blowout standards as required by the definition of Right-of-Way. In determining compliance with proposed FAC-003-2, the auditor would audit based on the width determined by the Transmission Owner.

V. CONCLUSION

For the reasons stated above, NERC respectfully requests that the Commission give “due weight” to NERC’s technical expertise with respect to the content of proposed Reliability Standard FAC-003-2 and approve the proposed standard as filed.

Respectfully submitted,

/s/ William H. Edwards

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Dated: December 21, 2012

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CERTIFICATE OF SERVICE

I hereby certify that I have served a copy of the foregoing document upon all parties listed on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, D.C. this 21st day of December, 2012.

/s/ William H. Edwards

William H. Edwards
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