

Compliance Application Notice – 0009

FAC-008 and FAC-009 Facility Ratings and Design Specifications

Posted: January 7, 2011

Revised: November 11, 2011

Primary Interest Groups

Compliance Enforcement Authority (CEA)¹

Transmission Owner (TO)

Generation Owner (GO)

Regional Entity

NERC

Issue: Should CEAs find a violation of FAC-008 R1 or FAC-009 when it is determined that constructed Facilities do not match design specifications?

For the purpose of aiding CEAs, this CAN provides instruction for assessing compliance with FAC-008 R1 and FAC-009 R1 when an entity's constructed Facilities do not match its design specifications.

Summary

Due to the Recommendation to Industry (discussed below), possible non-compliances may be discovered for registered entities that had developed the most robust Facility Rating Methodologies (FRMs). This CAN reinforces the premise that the recommendation was based on improving reliability, not creating compliance enforcement actions. It also provides for these Possible Violations to be held in abeyance for determination after the registered entity's assessment is complete, with strong considerations for a zero-dollar penalty or resolution through the Find, Fix and Track (FFT) recording mechanism.

Background

NERC's *Recommendation to Industry: Consideration of Actual Field Conditions in Determination of Facility Ratings*² (Recommendation) identified a reliability concern due to Facilities in the field not matching a registered entity's design specifications. This Recommendation contained a call to action for industry with key dates, which were revised on November 29, 2010, as follows:

- October 20, 2010 – Acknowledge receipt of Recommendation
- October 28, 2010 – Attend Webinar (optional)
- November 29, 2010 – Attend second Webinar (optional)

¹ Compliance Enforcement Authorities include ERO auditors, investigators, enforcement personnel or any person authorized to assess issues of concern, potential non-compliance, and possible, alleged or confirmed violations of NERC Reliability Standard requirements.

² Issued on October 7, 2010

- January 18, 2011– Assess impact of the alert and provide an action plan, as required, to NERC, including any extension requests for completing assessments (originally December 15, 2010)
- May 12, 2011 – Attend Webinar (optional)
- Complete assessments - Identify all discrepancies between the design and actual field conditions that are outside the registered entity’s design tolerances and report those discrepancies to NERC, applicable Reliability Coordinators (RCs), Transmission Operators (TOPs), and Regional Entities by:³
 1. **December 31, 2011 for High Priority Facilities**
 2. **December 31, 2012 for Medium Priority Facilities**
 3. **December 31, 2013 for Lowest Priority Facilities**
- Remediation to correct all issues identified during the assessment should occur as quickly as practical but within one year of identification; otherwise, entities are to obtain an approval from their respective Regional Entity to extend the deadline.

In addressing this important reliability Recommendation, registered entities may discover operational Facilities with discrepancies between design specifications used for the development of ratings and actual field conditions that are outside the entity’s design tolerances. While the importance of correcting these discrepancies within the above dates cannot be overstated, any such discrepancy is not necessarily a violation of the NERC Reliability Standards.

Nevertheless, such a discrepancy may contribute to a possible violation of one or more of the following requirements: FAC-008-1 R1 or FAC-009-1 R1 or R2, based on the facts and circumstances specific to each instance, as described below. NERC encourages each registered entity to closely examine its Facility Ratings methodology (FRM) required by FAC-008-1 R1 and the application of its FRM as required by FAC-009 R1 and R2 to determine if it is in compliance.

Compliance Application

FAC-008

FAC-008-1 requires a registered entity to have a documented FRM for developing Facility Ratings of its solely and jointly owned Facilities.

FAC-008 provides, in pertinent part:

R1. The Transmission Owner and Generator Owner shall each document its current methodology used for developing Facility Ratings (Facility Ratings Methodology) of its solely and jointly owned Facilities. The methodology shall include all of the following:

³ All assessments were originally due on April 7, 2011.

R1.1. *A statement that a Facility Rating shall equal the most limiting applicable Equipment Rating of the individual equipment that comprises that Facility.*

R1.2. *The method by which the Rating (of major BES equipment that comprises a Facility) is determined.*

R1.2.1. *The scope of equipment addressed shall include, but not be limited to, generators, transmission conductors, transformers, relay protective devices, terminal equipment, and series and shunt compensation devices.*

R1.2.2. *The scope of Ratings addressed shall include, as a minimum, both Normal and Emergency Ratings.*

R1.3. *Consideration of the following:*

R1.3.1. *Ratings provided by equipment manufacturers.*

R1.3.2. *Design criteria (e.g., including applicable references to industry Rating practices such as manufacturer's warranty, IEEE, ANSI or other standards).*

R1.3.3. *Ambient conditions.*

R1.3.4. *Operating limitations.*

R1.3.5. *Other assumptions.*

CEAs are to verify whether a registered entity's FRM included consideration of the equipment manufacturer's provided ratings (R1.3.1), design criteria (R1.3.2), ambient conditions (R1.3.3), operating limitations (R1.3.4) and other assumptions (R1.3.5) in its FRM.

FAC-009 R1

FAC-009-1 R1 requires TOs and GOs to establish Facility Ratings for their solely and jointly owned Facilities that are consistent with the associated FRM, which is required under FAC-008 R1.

FAC-009 provides, in pertinent part:

R1. *The Transmission Owner and Generator Owner shall each establish Facility Ratings for its solely and jointly owned Facilities that are consistent with the associated Facility Ratings Methodology.*

Therefore, in order for a CEA to determine whether a registered entity's Facility Ratings were established pursuant to the entity's FRM, the CEA is to first verify whether the entity's FRM addresses design criteria for Transmission Facilities, including clearances, and if so, whether the design criteria and clearances that are included are:

- 1) the actual physical application of the design criteria in the field for individual Facilities and/or actual clearances for individual Facilities; ***or***
- 2) did not include the actual physical application of the design criteria in the field for individual Facilities and/or actual clearances for individual Facilities. In this case, the entity may have stated design criteria broadly as general policy requirements.

If the CEA determines that Option 1 applies, i.e. where an entity’s FRM requires the inclusion of the actual clearances or the physical applications of design criteria in the field for individual Facilities in the calculation of the Facility Rating:

- If the entity’s calculated Facility Ratings do not reflect the FRM requirement, then the CEA is to find a non-compliance with FAC-009 R1. *See below for a discussion regarding compliance actions.*
- Additionally, where an entity’s Facility Ratings include the FRM requirement, the Facilities are to be constructed to the actual clearances and/or design criteria specified in the entity’s FRM. If the Facilities in the field are not constructed to design specifications and/or within acceptable tolerances for clearances, the CEA is to find a non-compliance with FAC-009 R1.

If the CEA determines that Option 2 applies, i.e. where clearances or design criteria are stated broadly as general policy requirements:

- A CEA is not to consider actual field construction in assessing compliance.

FAC-009 R2

FAC-009-1 R2 requires TOs and GOs to provide Facility Ratings for solely and jointly owned existing Facilities and new Facilities, as well as any modifications to existing Facilities or re-ratings of existing Facilities to their associated RCs, Planning Authorities (PA), Transmission Planners (TP), and TOPs as scheduled by such requesting entities.

FAC-009 provides, in pertinent part:

R2. The Transmission Owner and Generator Owner shall each provide Facility Ratings for its solely and jointly owned Facilities that are existing Facilities, new Facilities, modifications to existing Facilities and re-ratings of existing Facilities to its associated Reliability Coordinator(s), Planning Authority(ies), Transmission Planner(s), and Transmission Operator(s) as scheduled by such requesting entities.

In assessing compliance with FAC-009-1 R2, a CEA is to verify that an entity provided its current Facility Ratings as scheduled by the requesting entities. As R2 includes “new Facilities, modifications to existing

Facilities and re-ratings of existing Facilities,” a CEA is also to verify that TOs updated their ratings to address changing field conditions.

Effective Period for CAN

This revised CAN supersedes the original CAN, as well as all prior communications. CEAs are to use this CAN to assess compliance from April 19, 2011, regardless of the start date of the violation. It will remain in effect until such time that a future version of a FERC or other applicable government authority approved standard or interpretation becomes effective and addresses the specific issue contained in this CAN.

For any enforcement action in process and for audits that have been initiated,⁴ a CEA is to apply the appropriate discretion, including consideration of the specific facts and circumstances of the non-compliance, in determining whether to assess compliance pursuant to this CAN.

Evidence of Compliance

It is of prime importance that registered entities operate reliably within the requirements and assumptions that are contained in the registered entity’s FRM. The Recommendation cited above addresses only the issue of whether Facilities were constructed pursuant to a registered entity’s design specifications and required clearances.

During any finding of possible non-compliance, CEAs are to strongly consider a registered entity’s concerns for reliability, such as when the entity included the actual physical application of their design criteria in the field for individual Facilities and/or actual clearances for individual Facilities in their FRMs. In the event a CEA determined that there are discrepancies between the design and actual field conditions that are outside the registered entity’s design tolerances, the following will be strong considerations in the determination of a zero-dollar penalty or FFT resolution:

- the registered entity’s continuation of its robust FRM;
- timely and thorough evaluations by the registered entity of its system using accurate measurement methods and technologies;
- timely self-disclosure of any compliance gaps; and
- prompt corrective actions and consistent completion of its Mitigation Plan milestones.

Further, CEAs are to exercise discretion to hold the processing of all possible violations reported as a result of the assessments until the entity’s assessments are complete, as long as the registered entity reporting such possible violations is proceeding in good faith to complete the assessments.

⁴ “Initiated” means that a registered entity has received notification of the upcoming audit.

Please note that in the unlikely circumstance that an actual event occurs in which a CEA determines a discrepancy between actual conditions and facility ratings was a cause or contributing factor, the CEA is to proceed to investigate that case directly and not wait. Similarly, any possible violations of FAC-003 should continue to be reported immediately and may be processed separately and immediately by the CEA.

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This document is designed to convey compliance monitoring instruction to achieve a measure of consistency among auditors and Compliance Enforcement Authorities. It is not intended to establish new requirements under NERC's Reliability Standards or to modify the requirements in any existing NERC Reliability Standard. Compliance will continue to be assessed based on language in the currently enforceable NERC Reliability Standards. This document is not intended to define the exclusive method an entity must use to comply with a particular standard or requirement, or foreclose a registered entity's demonstration by alternative means that it has complied with the language and intent of the standard or requirement, taking into account the facts and circumstances of a particular registered entity. Implementation of information in this document is not a substitute for compliance with requirements in NERC's Reliability Standards.

Revision History

Posted Date	Action	Revision
January 7, 2011	Posted Final CAN	
November 11, 2011	Posted Revised CAN	Revised target audience to CEAs