



NORTH AMERICAN ELECTRIC  
RELIABILITY CORPORATION

September 25, 2009

Ms. Kimberly Bose  
Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, D.C. 20426

**Re: NERC Notice of Penalty regarding Tennessee Valley Authority, FERC Docket No. NP09-\_-000**

Dear Ms. Bose:

The North American Electric Reliability Corporation (NERC) hereby provides this Notice of Penalty<sup>1</sup> regarding Tennessee Valley Authority (TVA), NERC Registry ID NCR01151,<sup>2</sup> in accordance with the Federal Energy Regulatory Commission's (Commission or FERC) rules, regulations and orders, as well as NERC Rules of Procedure including Appendix 4C (NERC Compliance Monitoring and Enforcement Program (CMEP)).<sup>3</sup>

TVA self-certified non-compliance with Reliability Standard PRC-005-1 Requirements (R) 1 and R2 to SERC Reliability Corporation (SERC) on September 2, 2007, as part of its required annual self-certification of compliance due to be submitted to SERC Reliability Corporation on September 1, 2007.<sup>4</sup> TVA's self-certification submittal was specific to the compliance status of the Tennessee Valley Authority Distributors, a group of 159 electric power distribution companies surrounded by and interconnected with TVA's transmission system, some with ownership rights to transmission facilities operated at 100 kV or above ("Distributors"). TVA has accepted compliance responsibility for the TVA Distributors within the SERC region, and is included on the NERC Registry as the registered and responsible entity on behalf of these 159

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<sup>1</sup> *Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Electric Reliability Standards* (Order No. 672), III FERC Stats. & Regs. ¶ 31,204 (2006); *Notice of New Docket Prefix "NP" for Notices of Penalty Filed by the North American Electric Reliability Corporation*, Docket No. RM05-30-000 (February 7, 2008). *See also* 18 C.F.R. Part 39 (2008). *Mandatory Reliability Standards for the Bulk-Power System*, FERC Stats. & Regs. ¶ 31,242 (2007) (Order No. 693), *reh'g denied*, 120 FERC ¶ 61,053 (2007) (Order No. 693-A).

<sup>2</sup> SERC Reliability Corporation confirmed that Tennessee Valley Authority was included on the NERC Compliance Registry on May 31, 2007, as a Balancing Authority, Distribution Provider, Generator Owner, Generator Operator, Load Serving Entity, Planning Authority, Reliability Coordinator, Resource Planner, Transmission Operator, Transmission Owner, Transmission Planner and Transmission Service Provider, and on March 20, 2008 as an Interchange Authority, and was subject to the requirements of NERC Reliability Standard PRC-005-1.

<sup>3</sup> *See* 18 C.F.R. § 39.7(c)(2).

<sup>4</sup> The 2007 self-certifications for PRC-005 applicable to TVA's Distributors were due on September 1, 2007. However, since September 1 was on a Saturday, self-certification submittals were accepted through September 3, 2007.

Distributors.<sup>5</sup> This Notice of Penalty is being filed with the Commission because, based on information from SERC, TVA does not dispute the violations of PRC-005-1, R1 and R2 and the proposed penalty of zero dollars (\$0) to be assessed to TVA at issue in this Notice of Penalty. Accordingly, the violations identified as NERC Violation Tracking Identification Numbers SERC200700019 and SERC200700090 are Confirmed Violations, as that term is defined in the NERC Rules of Procedure and the CMEP.

### Statement of Findings Underlying the Violation

This Notice of Penalty incorporates the findings and justifications set forth in the Notice of Confirmed Violation and Proposed Penalty or Sanction (NOCV) regarding TVA issued on May 8, 2008, by SERC, and the Supplemental Record Information documents issued by SERC to TVA on October 6, 2008 and October 23, 2008. The details of the findings and basis for the penalty are set forth herein. This Notice of Penalty filing contains the basis for approval of this Notice of Penalty by the NERC Board of Trustees Compliance Committee (BOTCC). In accordance with Section 39.7 of the Commission’s regulations, 18 C.F.R. § 39.7 (2007), NERC provides the following summary table identifying each Reliability Standard at issue in this Notice of Penalty.

Region	Registered Entity	NOC ID	NERC Violation ID	Reliability Std.	Req. (R)	VRF	Total Penalty (\$)
SERC	Tennessee Valley Authority	NOC-56	SERC200700019	PRC-005-1	R1	High <sup>6</sup>	\$0
SERC	Tennessee Valley Authority	NOC-56	SERC200700090	PRC-005-1	R2	High <sup>7</sup>	

The purpose of Reliability Standard PRC-005-1 is to ensure all transmission and generation Protection Systems affecting the reliability of the bulk power system are maintained and tested.

In summary, PRC-005-1 R1 requires an entity such as TVA, a Transmission Owner which owns a transmission Protection System, to have a Protection System maintenance and testing program for Protection Systems that affect the reliability of the bulk power system. The program must

<sup>5</sup> On March 7, 2007, SERC received a letter from TVA accepting compliance responsibility for its 159 Distributors.

<sup>6</sup> When NERC filed VRFs for PRC-005, NERC originally assigned a “Medium” VRF to PRC-005-1 Requirement R1. In the Commission’s May 13, 2007 Order on Violation Risk Factors, the Commission approved the VRF as filed but directed modifications. On June 1, 2007, NERC filed the modified “High” VRF for PRC-005 Requirement R1 for approval. On August 6, 2007, the Commission issued an Order approving the modified VRF. Therefore, the “Medium” VRF was in effect from June 18, 2007 until August 6, 2007 and the “High” VRF has been in effect since August 6, 2007.

<sup>7</sup> PRC-005-1, R 2 has a “Low” VRF, but SERC Staff assigned the “High” VRF due to the violation of Sub-requirement 2.1 which has a “High” VRF. During a final review of the standards subsequent to the March 23, 2007 filing of the Version 1 VRFs, NERC identified that some standards requirements were missing VRFs; one of these include PRC-005-1 R2.1. On May 4, 2007, NERC assigned PRC-005 R2.1 a “High” VRF. In the Commission’s June 26, 2007 Order on Violation Risk Factors, the Commission approved the PRC-005-1 R2.1 “High” VRF as filed. Therefore, the “High” VRF was in effect from June 26, 2007.

include maintenance and testing intervals and their basis, and a summary of maintenance and testing procedures. PRC-005-1 R1 has a “High” Violation Risk Factor (VRF).

PRC-005-1 R2 requires TVA, a Transmission Owner which owns a transmission Protection System, to provide documentation of its Protection System maintenance and testing program and the implementation of that program to its Regional Entity on request (within 30 calendar days). The documentation of the program implementation shall include evidence that Protection System devices were maintained and tested within the defined intervals and the date each Protection System device was last tested and maintained. PRC-005-1, R2 has a “Lower” VRF, but the VRF assigned to Sub-requirement 2.1 is “High.”

During the 2007 self-certification process, TVA reported non-compliance with both requirements of the Reliability Standard PRC-005-1 because the documentation of maintenance and testing intervals and their basis and the schedule for system maintenance and testing was incomplete. TVA stated in its self-certification that a power distributor was in progress to define the philosophy, procedures, and frequency of testing and planned to have these documents in place by December 31, 2007. In addition, the power distributor also reported that its program to document maintenance and testing scheduling was incomplete and was revising their program to use their management system by May 31, 2008. The deficiencies pertained to two (2) of the TVA Distributors, each of which owns and operates transmission Protection Systems. The first Distributor was deemed to have been in violation of PRC-005-1 R1 because the Distributor’s Protection System maintenance and testing procedure document did not specify the intervals for maintenance and testing and the basis on which the intervals were determined, for all of its applicable relays. The second Distributor was deemed to be in violation of PRC-005-1 R2 because the Distributor could not produce evidence to confirm that its relevant protective system devices associated with transmission systems were maintained and tested within defined intervals. In the case of the second distributor, SERC Enforcement Staff identified the following instances of deficiency: (1) the documentation of relay testing was lacking, and (2) documentation of maintenance and basis for testing intervals was missing. This Distributor maintained and tested 213 relays (composed of both microprocessor-based and electro-mechanical types), 23 battery systems, and operates 150 current transformers, 20 voltage transformers, and 23 communications systems with ongoing monitoring. Of these Protection Systems, 88 relay systems were found to be outside their maintenance interval and 39 relay systems were found to be outside their testing interval. The majority of the relay systems outside their maintenance interval were microprocessor-based with self-diagnostics capabilities which by industry standards and manufacturer recommendations have an extended period for maintenance.

SERC determined that the violation began on June 18, 2007, the mandatory and effective date of the applicable NERC Reliability Standard. SERC determined that TVA was fully compliant with Reliability Standard PRC-005-1 R1 and R2 as of March 31, 2008. Therefore, the duration of each of the violations was from June 18, 2007 through March 31, 2008.

Section 4.2.2 of the NERC Sanction Guidelines states that:

If the actual or foreseen impact of the violation is judged to be inconsequential by NERC or the regional entity and the violation is the first incidence of violation of the

requirement in question by the violator, NERC or the regional entity may at its discretion: (i) set the Base Penalty Amount to a value it deems appropriate within the initial value range set above pursuant to Section 4.1, *or (ii) excuse the penalty for the violation (i.e. set the Base Penalty Amount to 0\$).*<sup>8</sup>

SERC exercised its discretion to assess no penalty for this violation because: (1) it occurred during the period of transition to mandatory standards during which the Commission authorized such discretion (*see* Order Nos. 693 and 693-A<sup>9</sup>); and (2) the violation was deemed by SERC not to be a violation that put bulk power system reliability at serious or substantial risk.

SERC also considered the specifics and limited scope of the two separate instances: the deficiencies occurred at only two separate Distributors out of the total 159; the Distributors' transmission systems are fully contained within the TVA system with no interconnections to other transmission systems; and, as discussed above, the deficiency in maintenance and testing impacted only 127 of 429 Protection System devices, the majority of which were microprocessor-based with self-diagnostics capabilities which by industry standards and manufacturer recommendations have an extended period for maintenance. In contrast, TVA has over 20,000 Protection Systems on its transmission system. Therefore, SERC concluded that the violations did not pose a serious or significant risk to the bulk power system. Additionally, SERC considered that TVA has no prior violation of this standard or any closely-related standard; TVA and its management cooperated with SERC staff; and there were no aggravating factors (no evidence of intent to violate, conceal or impede) identified during the course of SERC's investigation.

### **Status of Mitigation Plan**

TVA's initial Mitigation Plan to address the referenced violations was submitted to SERC on November 1, 2007. SERC did not accept the initial Mitigation Plan proposed by TVA because its completion date was not timely enough, so TVA submitted a revised plan to SERC on December 19, 2007, retaining the initial submittal date of November 1, 2007 and all of the mitigation and preventative actions, but changing the final milestone to an earlier completion date. TVA's revised Mitigation Plan was accepted by SERC on March 20, 2008. This Mitigation Plan, designated as MIT-07-0461, was approved by NERC on March 26, 2008 and submitted as non-public information to FERC on March 26, 2008, in accordance with FERC orders. TVA certified to SERC on March 31, 2008, that its Mitigation Plan was completed on March 31, 2008. SERC Staff reviewed the evidence submitted by TVA in support of its Certification of Completion, including a large amount of data for the two TVA Distributors that contained summarized testing information, maintenance schedules, testing dates, and basis for intervals. SERC Staff verified that the TVA Distributors created schedules for Protective System device testing, completed testing and documentation for non-compliant Protective System devices and completed documentation of maintenance and testing procedures incorporating all testing intervals and their basis. SERC Staff verified, on June 27, 2008, that the Mitigation Plan designated as MIT-07-0461 was fully mitigated by TVA on March 31, 2008.

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<sup>8</sup> See NERC Sanction Guidelines (emphasis added).

<sup>9</sup> See n.1 *supra*.

## Statement Describing the Proposed Penalty, Sanction or Enforcement Action Imposed

### FERC Order Excerpts

In Order No. 693, the Commission provided guidance to NERC and the industry on the determination of penalties during the first six month period of mandatory and enforceable Reliability Standards:

222. . . . In light of commenters' concerns, including the fact that there are new aspects to the Reliability Standards and the proposed compliance program that will apply to all users, owners and operators of the Bulk-Power System, *the Commission directs the ERO and Regional Entities to focus their resources on the most serious violations during an initial period through December 31, 2007.* This thoughtful use of enforcement discretion should apply to all users, owners and operators of the Bulk-Power System, and not just those new to the program as originally proposed in the NOPR. This approach will allow the ERO, Regional Entities and other entities time to ensure that the compliance monitoring and enforcement processes work as intended and that all entities have time to implement new processes.

223. *By directing the ERO and Regional Entities to focus their resources on the most serious violations through the end of 2007, the ERO and Regional Entities will have the discretion necessary to assess penalties for such violations, while also having discretion to calculate a penalty without collecting the penalty if circumstances warrant.* Further, even if the ERO or a Regional Entity declines to assess a monetary penalty during the initial period, they are authorized to require remedial actions where a Reliability Standard has been violated. Furthermore, where the ERO uses its discretion and does not assess a penalty for a Reliability Standard violation, we encourage the ERO to establish a process to inform the user, owner or operator of the Bulk-Power System of the violation and the potential penalty that could have been assessed to such entity and how that penalty was calculated. We leave to the ERO's discretion the parameters of the notification process and the amount of resources to dedicate to this effort. Moreover, the Commission retains its power under section 215(e)(3) of the FPA to bring an enforcement action against a user, owner or operator of the Bulk-Power System.

224. *The Commission believes that the goal should be to ensure that, at the outset, the ERO and Regional Entities can assess a monetary penalty in a situation where, for example, an entity's non-compliance puts Bulk-Power System reliability at risk.* Requiring the ERO and Regional Entities to focus on the most serious violations will allow the industry time to adapt to the new regime while also protecting Bulk-Power System reliability by allowing the ERO or a Regional Entity *to take an enforcement action against an entity whose violation causes a significant disturbance.* Our approach strikes a reasonable balance in ensuring that the ERO and Regional Entities will be able to enforce mandatory Reliability

Standards in a timely manner, while still allowing users, owners and operators of the Bulk-Power System time to acquaint themselves with the new requirements and enforcement program. In addition, our approach ensures that all users, owners and operators of the Bulk-Power System take seriously mandatory, enforceable reliability standards at the earliest opportunity and before the 2007 summer peak season.<sup>10</sup>

### **Basis for Determination**

The NERC BOTCC reviewed the NOCV and supporting documentation on November 7, 2008. Taking into consideration the Commission's direction in Order No. 693, the NERC Sanction Guidelines and the Commission's July 3, 2008 Guidance Order,<sup>11</sup> the NERC BOTCC affirmed SERC Reliability Corporation's determination to exercise enforcement discretion to impose a zero dollar (\$0) penalty against Tennessee Valley Authority based upon the NERC BOTCC's review of the applicable requirements of the Commission-approved Reliability Standards and the underlying facts and circumstances of the violation at issue.

In reaching this determination, the NERC BOTCC considered the following factors: (1) the violation was discovered in 2007 (during the period the Commission stated NERC and the Regional Entities should focus their enforcement resources on the most serious violations and those that involved a significant disturbance); (2) these violations were reported in a self-certification submitted by TVA and were corrected in a Mitigation Plan; (3) Tennessee Valley Authority asserted that all maintenance and testing was performed but no evidence was presented to show documentation of such maintenance and testing; and (4) the documentation violations were deemed not to be violations that put bulk power system reliability at serious or substantial risk because required maintenance and testing were occurring.

Therefore, NERC believes that the proposed zero dollar (\$0) penalty is appropriate and consistent with NERC's goal to ensure reliability of the bulk power system.

Pursuant to Order No. 693, the penalty will be effective upon expiration of the thirty (30) day period following the filing of this Notice of Penalty with FERC, or, if FERC decides to review the penalty, upon final determination by FERC.

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<sup>10</sup> Order No. 693 at PP 222-224 (emphasis added).

<sup>11</sup> *Guidance on Filing Reliability Notices of Penalty*, 124 FERC ¶ 61,015 (2008).

### **Attachments Included as Part of the Notice of Penalty**

The attachments included as part of this Notice of Penalty are the following documents and material:

- a) TVA's self-certification document dated September 2, 2007, included as Attachment a;
- b) TVA's response to the Notice of Alleged Violation and Proposed Penalty or Sanction, dated March 27, 2008, included as Attachment b;
- c) Mitigation Plan designated as MIT-07-0461, submitted December 19, 2007, included as Attachment c;
- d) TVA's Certification of Completion of Mitigation Plan, dated March 31, 2008, included as Attachment d; and
- e) Statement of SERC Compliance Staff Regarding Completion of Mitigation Plan, dated June 27, 2008, included as Attachment e.

### **A Form of Notice Suitable for Publication<sup>12</sup>**

A copy of a notice suitable for publication is included in Attachment f.

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<sup>12</sup> See 18 C.F.R § 39.7(d)(6).

## Notices and Communications

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

Rick Sergel  
President and Chief Executive Officer  
David N. Cook\*  
Vice President and General Counsel  
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Vice-President Transmission Reliability  
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\*Persons to be included on the Commission's service list are indicated with an asterisk. NERC requests waiver of the Commission's rules and regulations to permit the inclusion of more than two people on the service list.

Rebecca J. Michael\*  
Assistant General Counsel  
Holly A. Hawkins\*  
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## Conclusion

NERC respectfully requests that the Commission accept this Notice of Penalty as compliant with its rules, regulations and orders.

Respectfully submitted,

Rick Sergel  
President and Chief Executive Officer  
David N. Cook  
Vice President and General Counsel  
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/s/ Holly A. Hawkins  
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cc: Tennessee Valley Authority  
SERC Reliability Corporation

Attachments

## **Attachment a**

# **Tennessee Valley Authority's self-certification document**



**SERC**  
SERC Reliability Corporation

[Public Homepage](#) [Portal Homepage](#) 

**SERC Member Portal**  
Tennessee Valley Authority - Distributors

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Logged in as:  
**Catherine Sills**

[Log Out](#)

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### PRC-005-1-T LOC - Transmission and Generation Protection System Maintenance and Testing - 2007

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Attachments (0)

Reference Document: [Maintenance and Testing SERC Supplement](#)

**This form was marked as ready for authorized signatory approval on 9/2/2007.**

**Status: Read Only**

\* Required Fields

**Technical Contact**

\*  |

SERC will disclose this information to NERC and other third parties, only as required, and in accordance with established procedures pursuant to section 1500 of the NERC rules of procedure.

As an officer of **Tennessee Valley Authority - Distributors**,

I confirm the following:

**Section A:**

1. A Transmission Protection System maintenance and testing program is documented and implemented in accordance with NERC Reliability Standard PRC-005-1 (Transmission and Generation Protection System Maintenance and Testing).

Documentation of the program and its implementation will be made available to SERC on request (30 calendar days).

2. Documentation demonstrating implementation of a Transmission Protection System maintenance and testing program is incomplete and/or implementation is not on schedule (**check all that apply**):

- Transmission Protection System identification (Includes: relays, instrument transformers, communication systems, and batteries)
- Documentation of maintenance and testing intervals and their basis.
- Summary of testing procedure

- Schedule for system maintenance and testing.
- Implementation of the Transmission Protection System maintenance and testing program is not on schedule. **Tennessee Valley Authority - Distributors** expects to be on schedule by

- 3. The NERC Reliability Standard PRC-005-1 does not apply because **Tennessee Valley Authority - Distributors** does not own a Transmission Protection System.
- 4. The NERC Reliability Standard PRC-005-1 applies to **Tennessee Valley Authority - Distributors** and our data has been coordinated with and is covered by the submittal(s) of

	Master Account	First Name	Last Name	Telephone	Email

**Section B:**

- 1. This submittal also covers:

	Master Account	First Name	Last Name	Telephone	Email

*Note: For companies not listed, please contact [support@serc1.org](mailto:support@serc1.org)*

- 2. **Tennessee Valley Authority - Distributors** is registered as both a Transmission Owner (TO) and Generation Owner (GO).
  - This form covers all facilities owned by **Tennessee Valley Authority - Distributors**. Submittal of PRC-005-1-G LOC is not required.

This form does **not** cover the generation facilities owned by **Tennessee Valley Authority - Distributors**. Submittal of PRC-005-1-G LOC **is required**.

Additional Comments:

A power distributor is in progress to define the philosophy, procedures, and frequency of testing and plans to have these documents in place by December 31, 2007.

A power distributor reports their program to document maintenance and testing scheduling is incomplete and is revising their program to use their work management system. This system will be in place by May 31, 2008.

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## **Attachment b**

# **Tennessee Valley Authority's Response to the Notice of Alleged Violation and Proposed Penalty or Sanction, dated March 27, 2008**



Tennessee Valley Authority  
1101 Market St  
Chattanooga, TN 37402-2801

**James R. Dalrymple**  
Vice President  
Transmission & Reliability

March 27, 2008

Mr. Thomas J. Galloway  
Director of Compliance  
SERC Reliability Corporation  
2815 Coliseum Centre Drive  
Suite 500  
Charlotte, North Carolina 28217

Re: Notice of Alleged Violation and Proposed Penalty or Sanction  
NERC Violation Tracking Identification Numbers: SERC200700019,  
SERC200700090  
SERC Issue Tracking Number: 07-170

Dear Mr. Galloway:

This letter responds to SERC Reliability Corporation's (SERC) "Notice of Alleged Violation and Proposed Penalty or Sanction" ("Notice") dated February 26, 2008, in which SERC notified TVA of a potential alleged violation of NERC Reliability Standard PRC-005.

As you know, TVA has been working with certain of its distributors ("Distributors") to establish an arrangement under which TVA would serve as the joint registration agent for those Distributors. TVA has been working with Distributors to provide education of NERC and SERC requirements, to assess their current position, and to develop processes and procedures to ensure compliance with applicable reliability requirements.

On September 1, 2007, TVA reported that Distributors -- new entrants listed on the NERC Compliance Registry under the TVA joint registration umbrella -- were not fully compliant with all aspects of NERC Reliability Standard PRC-005 for the period June 1, 2006 to May 31, 2007 based on the inability of Distributors to produce documentary evidence of compliance. Since that time, TVA has worked with Distributors to resolve the identified gaps and to provide and maintain the documentation required by NERC Reliability Standard PRC-005.

Mr. Thomas J. Galloway  
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March 27, 2008

During the October 2007 SERC Board Meeting, you related to Tim Ponseti that TVA should file a mitigation plan with SERC to address the identified deficiencies, including establishing appropriate milestones to ensure remedy of the deficiencies by the summer of 2008. TVA and Distributors jointly developed a mitigation plan with a projected completion date of May 15, 2008. This plan was submitted to SERC on November 1, 2007. It was TVA's understanding, based on your conversation with Tim Ponseti, that providing a mitigation plan with a projected completion date of May 15, 2008 would demonstrate the necessary efforts by TVA and Distributors to remedy the identified gaps for NERC Reliability Standard PRC-005 and resolve the issue without further findings.

After TVA's mitigation plan was presented to the SERC Board Compliance Committee (BCC) on or about November 21, 2007, the BCC requested that TVA complete the mitigation plan by the first quarter of 2008. TVA and Distributors submitted a revised mitigation plan with a projected completion date of March 31, 2008 to SERC on December 19, 2007. Since that time, TVA has provided a progress report and additional information as requested by your February 7, 2008 letter regarding the scope of the mitigation plan. Although section VI of the Notice indicated that the mitigation plan had not yet been accepted by the SERC BCC, you recently confirmed that the mitigation plan was indeed accepted by the BCC on March 20, 2008, after the issuance of the Notice.

TVA is not contesting the allegation and has an approved mitigation plan on record at SERC, but notes that the alleged violation identified in the Notice applies to a time period before NERC Reliability Standard PRC-005 became mandatory and enforceable pursuant to the requirements of Section 215 of the Federal Power Act. Order No. 693, in which FERC approved 83 of 107 proposed reliability standards including PRC-005, did not take effect until June 18, 2007. The reporting period associated with the alleged violation, however, is May 31, 2006 through June 1, 2007.

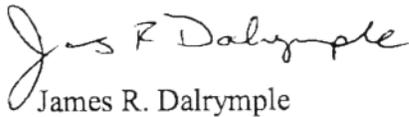
Additionally, the alleged violation is directed at new entrants on the NERC Compliance Registry who self-reported certain gaps for time periods prior to the effective date of their registration and who filed a mitigation plan, consistent with guidance received from SERC, to remedy the identified issues. As a matter of fairness, such new registrants should be given an appropriate amount of time to assess the applicable reliability standards, implement processes, practices, and procedures necessary to comply with those requirements, identify gaps, and develop and implement any necessary mitigation plans before facing potential violations and possible sanctions. Based on our conversation of March 25, 2008, however, it is TVA's understanding that

Mr. Thomas J. Galloway  
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SERC is assessing alleged violations on all new registrants that were not initially compliant with one or more of the applicable NERC Reliability Standard requirements, notwithstanding the approval and implementation of a mitigation plan to remedy the identified gaps.

TVA supports the efforts of you and your staff to enhance the reliability of the Eastern Interconnection. Please let me know if I can provide any additional information.

Sincerely,

  
James R. Dalrymple

## **Attachment c**

**Mitigation Plan designated as MIT-07-0461**



# Mitigation Plan Submittal Form

Date this Mitigation Plan is being submitted: November 1, 2007

If this Mitigation Plan has already been completed:

- Check this box  and
- Provide the Date of Completion of the Mitigation Plan:

## Section A: Compliance Notices

- Section 6.2 of the CMEP<sup>1</sup> sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:
  - (1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section 2.0.
  - (2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.
  - (3) The cause of the Alleged or Confirmed Violation(s).
  - (4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).
  - (5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).
  - (6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.
  - (7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.
  - (8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined for not completing work associated with accepted milestones.
  - (9) Any other information deemed necessary or appropriate.
  - (10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self-Certification or Self Reporting submittals.

<sup>1</sup> "Uniform Compliance Monitoring and Enforcement Program of the North American Electric Reliability Corporation;" a copy of the current version approved by the Federal Energy Regulatory Commission is posted on NERC's website.

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- This submittal form shall be used to provide a required Mitigation Plan for review and approval by SERC and NERC.
- The Mitigation Plan shall be submitted to SERC and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.
- This Mitigation Plan form may be used to address one or more related violations of one Reliability Standard. A separate mitigation plan is required to address violations with respect to each additional Reliability Standard, as applicable.
- If the Mitigation Plan is approved by SERC and NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission in accordance with applicable Commission rules, regulations and orders.
- SERC or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.
- Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

**Section B: Registered Entity Information**

B.1 Identify your organization:

Company Name: Tennessee Valley Authority  
Company Address: 1101 Market Street Chattanooga, TN 37402  
NERC Compliance Registry ID *[if known]*:

B.2 Identify the individual in your organization who will serve as the Contact to SERC regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to SERC regarding this Mitigation Plan.

Name: Larry Akens  
Title: Mgr, Compliance & System Analysis  
Email: lgakens@tva.gov  
Phone: 423 751-8860

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**Section C: Identity of Reliability Standard Violations Associated with this Mitigation Plan**

This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

C.1 Standard: PRC-005  
*[Identify by Standard Acronym (e.g. FAC-001-1)]*

C.2 Requirement(s) violated and violation dates:  
*[Enter information in the following Table]*

NERC Violation ID # [if known]	SERC Violation ID # [if known]	Requirement Violated (e.g. R3.2)	Violation Date <sup>(*)</sup>
SERCYYYnnnnn	YYYY-nnn	R1 & R2	09/01/07

(\*) Note: The Violation Date shall be: (i) the date that the violation occurred; (ii) the date that the violation was self-reported; or (iii) the date that the violation has been deemed to have occurred on by SERC. Questions regarding the date to use should be directed to SERC.

C.3 Identify the cause of the violation(s) identified above:

Documentation of all maintenance and testing intervals and their basis along with a summary of maintenance and testing procedures is incomplete for one of TVA's power distributors (R1).

A TVA power distributor did not have sufficient documentation to show Protective system devices were maintained and tested within defined intervals (R2).

[Provide your response here; additional detailed information may be provided as an attachment as necessary]

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C.4 **[Optional]** Provide any relevant additional information regarding the violations associated with this Mitigation Plan:

This mitigation plan is being submitted to SERC following an internal assessment completed by TVA and the power distributors being covered by TVA as a Joint Registration Organization.

[Provide your response here; additional detailed information may be provided as an attachment as necessary]

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**Section D: Details of Proposed Mitigation Plan**

**Mitigation Plan Contents**

D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violations identified above in Part C.2 of this form:

The power distributor will complete documentation of maintenance and testing procedures along with testing intervals and their basis for transmission protective systems operated at 100-kV and above (R1).

The power distributor will complete the documentation to show Protective System devices associated with transmission systems operated at 100-kV and above were maintained and tested within defined intervals.(R2).

**Check this box  and proceed to Section E of this form if this Mitigation Plan, as set forth in Part D.1, has already been completed; otherwise respond to Part D.2, D.3 and, optionally, Part D.4, below.**

**Mitigation Plan Timeline and Milestones**

D.2 Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected: May 15, 2008

D.3 Enter Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Proposed Completion Date* (shall not be more than 3 months apart)
Complete documentation of maintenance and testing procedures and testing intervals and their basis	December 31, 2007
Determine documentation/testing needs	December 31, 2007
Create schedules for Protective System Device testing	February 29, 2008

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Complete testing and documentation for non-compliant Protective System Devices	March 31, 2008
--	----------------

(\* Note: Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined for not completing work associated with accepted milestones.

[Note: Provide your response here; additional detailed information may be provided as an attachment as necessary]

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**Additional Relevant Information (Optional)**

- D.4 If you have any relevant additional information that you wish to include regarding the mitigation plan, milestones, milestones dates and completion date proposed above you may include it here:

[Provide your response here; additional detailed information may be provided as an attachment as necessary]

**Section E: Interim and Future Reliability Risk**

***Check this box  and proceed and respond to Part E.2 and E.3, below, if this Mitigation Plan, as set forth in Part D.1, has already been completed.***

**Abatement of Interim BPS Reliability Risk**

- E.1 While your organization is implementing the Mitigation Plan proposed in Part D of this form, the reliability of the Bulk Power System may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

No risks to the Bulk Power System have been identified

[Provide your response here; additional detailed information may be provided as an attachment as necessary]

**Prevention of Future BPS Reliability Risk**

- E.2 Describe how successful completion of the Mitigation Plan as laid out in Part D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

[Provide your response here; additional detailed information may be provided as an attachment as necessary]

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- E.3 Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Part D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Part C.2, or of other reliability standards. If so, identify and describe any such action, including milestones and completion dates:

A power distributor will add schedules for maintenance and test of protective devices to their work management system. This is scheduled to be complete on or before May 15, 2008.

[Provide your response here; additional detailed information may be provided as an attachment as necessary]

Continued on Next Page

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## Section F: Authorization

An authorized individual must sign and date this Mitigation Plan Submittal Form. By doing so, this individual, on behalf of your organization:

- a) Submits the Mitigation Plan, as laid out in Section D of this form, to SERC for acceptance by SERC and approval by NERC, and
- b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and
- c) Acknowledges:
  1. I am a Vice President of Tennessee Valley Authority.
  2. I am qualified to sign this Mitigation Plan on behalf of Tennessee Valley Authority.
  3. I have read and understand Tennessee Valley Authority's obligations to comply with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure, including Appendix 4(C) (Compliance Monitoring and Enforcement Program of the North American Electric Reliability Corporation" (NERC CMEP)).
  4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
  5. Tennessee Valley Authority agrees to be bound by, and comply with, the Mitigation Plan, including the timetable completion date, as approved by SERC and approved by NERC.

**Authorized Individual Signature**

A handwritten signature in black ink that reads 'Tim Ponseti'. The signature is written in a cursive style and is positioned above a horizontal line.

(Electronic signatures are acceptable; see CMEP)

Name (Print): Tim Ponseti

Title: Acting Vice President, Transmission & Reliability

Date: December 19, 2007

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**Section G: Comments and Additional Information**

You may use this area to provide comments or any additional relevant information not previously addressed in this form.

[Provide your response here; additional detailed information may be provided as an attachment as necessary]

**Submittal Instructions:**

Please convert the completed and signed document to an Adobe .pdf document using the following naming convention:

[(MP Entity Name (STD-XXX) MM-DD-YY).pdf]

Email the pdf file to [serccomply@serc1.org](mailto:serccomply@serc1.org).

Please direct any questions regarding completion of this form to:

Ken Keels  
Manager, Compliance Enforcement  
SERC Reliability Corporation  
704-357-7372  
[kkeels@serc1.org](mailto:kkeels@serc1.org)

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**Attachment d**

**Tennessee Valley Authority's Certification of  
Completion of the Mitigation Plan,  
dated June 27, 2008**

Print on Registered Entity's Corporate Letterhead

To Close Out a Completed Mitigation Plan, fill out this form, save and email it to [serccomply@serc1.org](mailto:serccomply@serc1.org).

*All Mitigation Plan Completion Certification submittals shall include data or information sufficient for SERC to verify completion of the Mitigation Plan. SERC may request such additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)*

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## Certification of a Completed Mitigation Plan

### SERC Reliability Corporation Violation Mitigation Plan Closure Form (Form Revised 10-25-07)

Name of Registered Entity submitting certification: Tennessee Valley Authority

Date of Certification:

Name of Standard and the Requirement(s) of mitigated violation(s): PRC-005

SERC Tracking Number (contact SERC if not known): 07-170

NERC Violation ID Number (if assigned):

**Date of completion of the Mitigation Plan: March 31, 2008**

I certify that the mitigation plan for the above named violation has been completed on the date shown above, and that all information submitted information is complete and correct to the best of my knowledge.

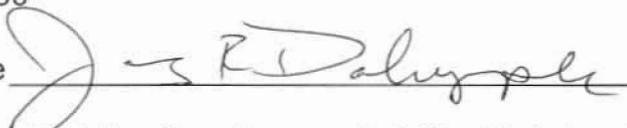
Name: Larry Akens

Title: Manager, Compliance & System Analysis

Entity: Tennessee Valley Authority

Email: lgakens@tva.gov

Phone: 423 751-8860

Executive Signature  Date 3/31/08

[NOTE – Closure Form should be signed by same individual that signed Mitigation Plan]

## **Attachment e**

# **Statement of SERC Reliability Corporation Compliance Staff Regarding Verification of Completion of Mitigation Plan**



SERC Reliability Corporation  
2815 Coliseum Centre Drive | Suite 500  
Charlotte, NC 28217  
704.357.7372 | Fax 704.357.7914 | [www.serc1.org](http://www.serc1.org)

## Statement of SERC Reliability Corporation Compliance Staff Regarding Completion of Mitigation Plan

Registered Entity: Tennessee Valley Authority (TVA)  
SERC Tracking ID: 07-170  
NERC Violation No: SERC200700019, SERC200700090  
NERC Mitigation Plan ID: MIT-07-0461  
Standard: PRC-005-1  
Requirements: R1, R2

### Violation Summary:

Tennessee Valley Authority (TVA) assumed compliance responsibility for two TVA transmission power distributors. One of the TVA transmission power distributor's qualified facilities did not have documentation of their maintenance and testing procedures and did not have documentation of testing intervals and their basis as specified in Requirement 1. The other TVA transmission power distributor had insufficient documentation to reflect that protective system devices were maintained and tested within defined intervals as specified in Requirement 2.

SERC Reliability Corporation Compliance Staff (SERC Staff) concluded that TVA was in violation of Requirement 1 and Requirement 2 because the existing documentation of PRC-005-1 for the two TVA power distributors was deficient.

### Mitigation Plan Summary:

TVA's Mitigation Plan to address the referenced violation was accepted by SERC on March 20, 2008 and approved by NERC on March 26, 2008 and was submitted as non-public information to FERC on March 26, 2008 in accordance with FERC orders.

TVA created schedules for Protective System Device testing, completed testing and documentation for non-compliant Protective System Devices and completed documentation of maintenance and testing procedures incorporating all testing intervals and their basis. The Mitigation Plan was for the two separate TVA transmission power distributors.

**SERC's Monitoring of Registered Entity's Mitigation Plan Progress:**

SERC Staff monitors the Registered Entity's progress towards completion of its Mitigation Plans in accordance with Section 6.0 of the uniform Compliance Monitoring and Enforcement Program, ("CMEP"). Pursuant to the CMEP, Registered Entities are required to establish implementation milestones no more than three (3) months apart. SERC Staff solicits quarterly reports from all Registered Entities with open mitigation plans to monitor the progress on completion of milestones. SERC Staff also produces and reviews daily Mitigation Plan status reports highlighting Mitigation Plans that are nearing the scheduled completion date. If the Registered Entity fails to complete its Mitigation Plan according to schedule, appropriate additional enforcement action is initiated to assure compliance is attained.

**Mitigation Plan Completion Review Process:**

TVA certified on March 31, 2008 that the subject Mitigation Plan was completed on March 31, 2008. A SERC compliance staff member reviewed the evidence submitted in a manner similar to a compliance audit. That action was followed by another compliance staff member's peer review of the initial conclusion.

**Evidence Reviewed:**

TVA submitted and SERC Staff reviewed the following evidence in support of its certification that its Mitigation Plan was completed in accordance with its terms:

SERC Staff reviewed a large amount of data for the two TVA transmission distributors that contained summarized testing information, maintenance schedules, testing dates, and bases for interval as required in PRC-005-1.

- 07-170 TVA Report\_NERC.xls  
*(This example is a large spreadsheet with numerous sheet tabs listing the various components, component identification numbers, location and maintenance and testing frequency dates for evidence that each component was last tested and maintained in defined intervals.)*
- 07-170 TVA (PRC-005) Basis\_Relays.doc  
*(Documentation for relays of one of the TVA Distributors - contains maintenance & testing intervals and their basis and summary of maintenance and testing procedures.)*
- 07-170 TVA (PRC-005) NES Substation Battery Systems.doc  
*(Summary of battery maintenance and testing procedures for one of the distributors.)*

**Conclusion:**

On June 27, 2008 SERC Staff completed its review of the evidence submitted by TVA in support of its Certification of Completion of the subject Mitigation Plan. Based on its review of the evidence submitted, SERC Staff hereby verifies that, in its professional judgment, all required actions in the Mitigation Plan have been completed and TVA is in compliance with the subject Reliability Standard Requirements.

This Statement, along with the subject Mitigation Plan, may become part of a public record upon final disposition of the possible violation.

**Respectfully Submitted,**

Mark Ladrow, Compliance Engineer  
Sam Stryker, Auditor

**Attachment f**

**Notice of Filing**

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Tennessee Valley Authority

Docket No. NP09-\_\_\_\_-000

NOTICE OF FILING  
September 25, 2009

Take notice that on September 25, 2009, the North American Electric Reliability Corporation (NERC) filed a Notice of Penalty regarding Tennessee Valley Authority in the SERC Reliability Corporation region.

Any person desiring to intervene or to protest this filing must file in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211, 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a notice of intervention or motion to intervene, as appropriate. Such notices, motions, or protests must be filed on or before the comment date. On or before the comment date, it is not necessary to serve motions to intervene or protests on persons other than the Applicant.

The Commission encourages electronic submission of protests and interventions in lieu of paper using the "eFiling" link at <http://www.ferc.gov>. Persons unable to file electronically should submit an original and 14 copies of the protest or intervention to the Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426.

This filing is accessible on-line at <http://www.ferc.gov>, using the "eLibrary" link and is available for review in the Commission's Public Reference Room in Washington, D.C. There is an "eSubscription" link on the web site that enables subscribers to receive email notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please email [FERCOnlineSupport@ferc.gov](mailto:FERCOnlineSupport@ferc.gov), or call (866) 208-3676 (toll free). For TTY, call (202) 502-8659.

Comment Date: [BLANK]

Kimberly D. Bose,  
Secretary