



NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

February 1, 2010

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

**Re: NERC Notice of Penalty regarding Public Service Electric & Gas Company
FERC Docket No. NP10-_-000**

Dear Ms. Bose:

The North American Electric Reliability Corporation (NERC) hereby provides this Notice of Penalty¹ regarding Public Service Electric & Gas Company (PSE&G), NERC Registry ID# NCR00896,² 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)).³

On September 2, 2008, as part of an internal self-assessment prior to a scheduled Compliance Audit, PSE&G self reported to ReliabilityFirst Corporation (ReliabilityFirst) a possible violation of Reliability Standard PRC-005-1 Requirement (R) 2.1 for PSE&G's failure to maintain documentation of some of the maintenance and testing it conducted on its Protection System devices.

This Notice of Penalty is being filed with the Commission because, based on information from ReliabilityFirst, ReliabilityFirst and PSE&G have entered into a Settlement Agreement to resolve all outstanding issues arising from a preliminary and non-public assessment resulting in ReliabilityFirst's determination and findings of the enforceable alleged violation of PRC-005-1 R2.1. According to the Settlement Agreement, PSE&G neither admits nor denies the alleged violation, but has agreed to the proposed penalty of five thousand dollars (\$5,000) to be assessed

¹ *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). See 18 C.F.R. § 39.7(c)(2).

² ReliabilityFirst confirmed that PSE&G was included on the NERC Compliance Registry as a Distribution Provider, Load Serving Entity and Transmission Owner as of May 30, 2007. As a Transmission Owner and Distribution Provider, PSE&G is subject to the requirements of NERC Reliability Standard PRC-005-1.

³ See 18 C.F.R. § 39.7(c)(2).

to PSE&G, in addition to other remedies and actions to mitigate the instant violation and facilitate future compliance under the terms and conditions of the Settlement Agreement. Accordingly, the alleged violation identified as NERC Violation Tracking Identification Number RFC200800122 is being filed in accordance with the NERC Rules of Procedure and the CMEP.

Statement of Findings Underlying the Alleged Violation

This Notice of Penalty incorporates the findings and justifications set forth in the Settlement Agreement executed on September 21, 2009, by and between ReliabilityFirst and PSE&G, which is included as Attachment b. The details of the findings and basis for the penalty are set forth in the Settlement Agreement and herein. This Notice of Penalty filing contains the basis for approval of the Settlement Agreement by the NERC Board of Trustees Compliance Committee (NERC 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 alleged violation of a Reliability Standard resolved by the Settlement Agreement, as discussed in greater detail below.

Region	Registered Entity	NOC ID	NERC Violation ID	Reliability Std.	Req. (R)	VRF	Total Penalty (\$)
RFC	PSE&G	NOC-385	RFC200800122	PRC-005-1	2.1	High ⁴	\$5,000

PRC-005-1 R2.1

The purpose of Reliability Standard PRC-005-1 is to ensure all transmission and generation Protection Systems⁵ affecting the reliability of the Bulk Power System (BPS) are maintained and tested.

PRC-005-1 R2 requires a Transmission Owner and any Distribution Provider, such as PSE&G, that 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). Specifically, R2.1 requires that the documentation of the program implementation to include evidence Protection System devices were maintained and tested within the defined intervals. PRC-005-1 R2.1 has a "High" Violation Risk Factor (VRF).

On September 2, 2008, PSE&G self-reported to ReliabilityFirst via telephone that, as a result of a self assessment prior to a schedule Compliance Audit, PSE&G discovered that clerical errors,

⁴ PRC-005-1 R2 has a "Lower" Violation Risk Factor (VRF); R2.1 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.

⁵ The *NERC Glossary of Terms Used in Reliability Standards*, updated April 20, 2009, defines Protection System as "Protective relays, associated communication systems, voltage and current sensing devices, station batteries and DC control circuitry."

which occurred during its conversion from a manual to a computerized maintenance and testing program.⁶ Ultimately, it was determined that PSE&G did not have evidence for 16 applicable Protection System relay devices (out of approximately 5,700 BPS Protection System devices) verifying they were tested within their defined intervals. The alleged violation was confirmed during an on-site Compliance Audit conducted from November 18, 2008 to November 19, 2008 (Audit). PSE&G initially reported 28 protection system devices; however, PSE&G was able to locate test records for 6 devices and it was determined that another 6 were still within their testing intervals, leaving 16, because the intervals were extended as the subject Standards requirement only became applicable to those devices after RFC changed its definition of the BPS.⁷ PSE&G completed testing of the undocumented components by September 23, 2008.

During the Audit, ReliabilityFirst Audit Team (Audit Team), upon review of the records from PSE&G's September 2008 self assessment, confirmed a possible alleged violation of Reliability Standard PRC-005-1 R2.1 due to the loss of evidence caused by the above mentioned clerical errors.

On May 1, 2009, PSE&G submitted a Mitigation Plan and notified ReliabilityFirst that it discovered, after initiating a "walk down" inspection, that additional protection system devices were either missing documentation of test interval or were miscoded in the electronic system. PSE&G completed its "walk down" inspection on June 1, 2009 and found an additional 72 protection system devices for which it could not provide evidence that maintenance and testing had been conducted within the defined intervals.

On May 26, 2009, PSE&G updated the May 1, 2009 Mitigation Plan with additional information on the total number of relays that were either missing documentation of test interval or were miscoded in the electronic system after initiating a "walk down" inspection which ReliabilityFirst accepted on June 3, 2009. PSE&G completed testing of the 72 newly discovered protection system devices by June 16, 2009 and determined there were no associated misoperations.

PSE&G was able to show, for all 88 components, that it had tested adjacent or associated Protection System devices. It is customary, for PSE&G to conduct maintenance and testing of its Protection System devices as a group so it is highly probable that the subject devices were in fact tested within their defined interval.

ReliabilityFirst determined that PSE&G had an alleged violation of PRC-005-1 R2.1 because PSE&G failed to provide sufficient evidence regarding whether eighty-eight (88) Protection System devices were tested in accordance with PSE&G's program parameters. ReliabilityFirst

⁶ According to the Settlement Agreement, in 2001, PSE&G was transitioning from a manual maintenance and testing work management program to an automated SAP work management system. It was discovered during the internal self-assessment that certain relays were either incorrectly entered into the system or were not entered into the system at all.

⁷ On May 9, 2007, the ReliabilityFirst Board of Directors unanimously approved the new definition of bulk electric system shown above for determining compliance to Reliability Standards across the ReliabilityFirst footprint. See "Informational Compliance Filing of the North American Electric Reliability Corporation in Response to Paragraph 77 of Order No. 693" at p. 10. Docket No. RM06-16-000 (Submitted June 14, 2007).

determined the duration of the alleged violation to be from June 17, 2007, the date the standard became enforceable, through June 16, 2009, when PSE&G completed its Mitigation Plan.

Regional Entity's Basis for Penalty

According to the Settlement Agreement, RFC has assessed a penalty of five thousand dollars (\$5,000) for the referenced alleged violation. In reaching this determination, ReliabilityFirst considered the following factors. The alleged violation did not pose a serious or substantial risk to the bulk power system because: (1) the alleged violation was considered to be documentation in nature because, as documentation was available for all the devices associated with, or adjacent to, the devices whose testing was undocumented, it was probable that the devices were tested but the documentation had been misplaced or not recorded; and (2) all subject components were tested successfully and found to be fully functional and operable.

After consideration of these and the above factors, ReliabilityFirst determined that, in this instance, the penalty amount of five thousand dollars (\$5,000) is appropriate and bears a reasonable relation to the seriousness and duration of the alleged violation.

Status of Mitigation Plan⁸

PSE&G's Mitigation Plan to address its alleged violation of PRC-005-1 R2.1 was submitted to ReliabilityFirst on May 1, 2009, revised on May 26, 2009.⁹ The Mitigation Plan was accepted by ReliabilityFirst on June 3, 2009 and approved by NERC on June 17, 2009. The Mitigation Plan for this alleged violation is designated as MIT-07-1758 and was submitted as non-public information to FERC on June 19, 2009 in accordance with FERC orders.

PSE&G's Mitigation Plan required PSE&G to: (1) enter devices not entered or miscoded into SAP and perform maintenance and testing as soon as practicable per the PSE&G Protection System Maintenance and Testing Program; (2) complete its Consultant Root Cause Analysis report; (3) conduct a "walk down" of all BPS Facilities to verify all devices are included and properly coded in the SAP Work Management System; and (4) schedule maintenance and testing of any identified devices.

PSE&G certified on June 16, 2009 that its Mitigation Plan was completed as of June 16, 2009. As evidence of completion of its Mitigation Plan, PSE&G submitted the following:

- *PSE&G Relays with Maintenance and Testing Issues* (pg. 1-2) (Devices 1-28 with issues) and associated *Relay Test Orders* and test result sheets (pg. 3-131) (submitted May 21, 2009).
- *PSE&G Relays with Maintenance and Testing Issues* (pg. 1) (Devices 29-52 with issues) and associated *Relay Test Orders* and test result sheets (pg. 2-61) (submitted May 21, 2009).

⁸ See 18 C.F.R. § 39.7(d)(7).

⁹ On May 26, 2009, PSE&G submitted additional information which was included in the May 1, 2009 Mitigation Plan. Therefore the Mitigation Plan original submittal date of May 1, 2009 remains as the additional information on the number of relays was included after the "walk down" inspections. The Mitigation Plan accepted and approved by NERC is the Mitigation Plan submitted May 26, 2009; however, the date on this submittal remained May 1, 2009 per the above explanation.

- *PSE&G Relays with Maintenance and Testing Issues* (pg. 1) (Devices 53-100 with issues) and associated *Relay Test Orders* and test result sheets (pg. 2-106) (submitted June 22, 2009).
- RFC200800122 MP Completion - Evidence Review (Response to review comments - submitted July 17, 2009).
- Database Screenshots (pg1-4) (Additional evidence that was requested to corroborate RFC200800122 MP Completion - Evidence Review document - submitted July 23, 2009).

On September 8, 2009, after reviewing PSE&G's submitted evidence, ReliabilityFirst verified that PSE&G's Mitigation Plan was complete as of June 16, 2009 and that PSE&G was in compliance with PRC-005-1 R2.1.

Statement Describing the Proposed Penalty, Sanction or Enforcement Action Imposed¹⁰

Basis for Determination

Taking into consideration the Commission's direction in Order No. 693, the NERC Sanction Guidelines and the Commission's July 3, 2008 Guidance Order,¹¹ the NERC BOTCC reviewed the Settlement Agreement and supporting documentation on December 9, 2009. The NERC BOTCC approved the Settlement Agreement, including ReliabilityFirst's imposition of a financial penalty, assessing a penalty of five thousand dollars (\$5,000) against PSE&G and other actions to facilitate future compliance required under the terms and conditions of the Settlement Agreement. In approving the Settlement Agreement, the NERC BOTCC reviewed the applicable requirements of the Commission-approved Reliability Standards and the underlying facts and circumstances of the alleged violation at issue.

In reaching this determination, the NERC BOTCC considered the following factors:

- (1) PSE&G self-reported the violation via telephone as part of its self assessment;
- (2) this violation constituted PSE&G's first occurrence of violation of the applicable NERC Reliability Standards;
- (3) the violation was probably a documentation issue as discussed above;
- (4) ReliabilityFirst reported PSE&G was cooperative throughout the enforcement process;
- (5) there was no evidence of any attempt to conceal a violation nor evidence of intent; and
- (6) the alleged violation did not pose a serious or substantial risk to the BPS as discussed above.

For the foregoing reasons, the NERC BOTCC approves the Settlement Agreement and believes that the proposed penalty of five thousand dollars (\$5,000) is appropriate for the violation and

¹⁰ See 18 C.F.R. § 39.7(d)(4).

¹¹ *North American Electric Reliability Corporation*, "Guidance Order on Reliability Notices of Penalty," 124 FERC ¶ 61,015 (2008).

circumstances in question, and is consistent with NERC's goal to promote and ensure reliability of the bulk power system.

Pursuant to Order No. 693, the penalty will be effective upon expiration of the 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.

Attachments to be Included as Part of this Notice of Penalty

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

- a) ReliabilityFirst's Audit Report for the alleged violation of PRC-005-1 R2.1 dated January 28, 2009, included as Attachment a;
- b) Settlement Agreement by and between PSE&G and ReliabilityFirst executed September 21, 2009, included as Attachment b;
- c) PSE&G's Mitigation Plan designated as MIT-07-1758 for the alleged violation of PRC-005-1 R2.1, submitted May 1, 2009 and revised on May 26, 2009, included as Attachment c;
- d) PSE&G's Certification of Completion of the Mitigation Plan for the alleged violation of PRC-005-1 R2.1, submitted June 16, 2009, included as Attachment d; and
- e) ReliabilityFirst's Verification of Completion of the Mitigation Plan for the alleged violation of PRC-005-1 R2.1, dated September 8, 2009, included as Attachment e.

A Form of Notice Suitable for Publication¹²

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

¹² 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:

<p>Gerald W. Cauley* President and Chief Executive Officer David N. Cook* Vice President and General Counsel North American Electric Reliability Corporation 116-390 Village Boulevard Princeton, N.J. 08540-5721 (609) 452-8060 (609) 452-9550 – facsimile gerry.cauley@nerc.net david.cook@nerc.net</p> <p>Timothy R. Gallagher* President and Chief Executive Officer Raymond J. Palmieri* Vice President and Director of Compliance ReliabilityFirst Corporation 320 Springside Drive, Suite 300 Akron, Ohio 44333 (330) 456-2488 tim.gallagher@rfirst.org ray.palmieri@rfirst.org</p> <p>Robert K. Wargo* Manager of Compliance ReliabilityFirst Corporation 320 Springside Drive, Suite 300 Akron, Ohio 44333 (330) 456-2488 bob.wargo@rfirst.org</p> <p>David J. Coyle* Compliance Specialist ReliabilityFirst Corporation 320 Springside Drive, Suite 300 Akron, Ohio 44333 (330) 456-2488 dave.coyle@rfirst.org</p>	<p>Rebecca J. Michael* Assistant General Counsel Holly A. Hawkins* Attorney North American Electric Reliability Corporation 1120 G Street, N.W. Suite 990 Washington, D.C. 20005-3801 (202) 393-3998 (202) 393-3955 – facsimile rebecca.michael@nerc.net holly.hawkins@nerc.net</p> <p>Jeffrey C. Mueller* Manager – ERO/RE Policy & Standard Interface Public Service Electric and Gas Company 80 Park Plaza, T-13 Newark, New Jersey 07102-4149 (973) 430-8447 jeffrey.mueller@pseg.com</p> <p>Paul Napoli* Director – Transmission Business Strategy Public Service Electric and Gas Company 80 Park Plaza, T-13 Newark, New Jersey 07102-4149 (973) 430-3724 paul.napoli@pseg.com</p> <p>Jodi L. Moskowitz* General Regulatory Counsel Operations & Compliance Public Service Electric and Gas Company 80 Park Plaza, T5G Newark, New Jersey 07102 (973) 430-6409 jodi.moskowitz@pseg.com</p> <p>*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.</p>
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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,

/s/ Rebecca J. Michael

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cc: Public Service Electric & Gas Company
ReliabilityFirst Corporation

Attachments

Attachment a

**ReliabilityFirst's Audit Report for the alleged
violation of PRC-005-1 R2.1 dated January 28,
2009**



Compliance Audit Report Public Version

Public Service Electric & Gas Company
NERC ID# NCR00896

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Critical Energy Infrastructure Information)
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Date of Audit: November 18 – November 19, 2008

Date of Audit Report: January 28, 2009

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Executive Summary

An on-site compliance audit of Public Service Electric & Gas Company (PSE&G) was conducted from November 18, 2008 to November 19, 2008. At the time of the audit, PSE&G was registered for the Transmission Owner (TO), Distribution Provider (DP) and Load Serving Entity (LSE) functions.

The audit team evaluated PSE&G for compliance with forty four (44) requirements in twenty three (23) NERC Reliability Standards for the period of June 18, 2007 to November 19, 2008. PSE&G submitted information and documentation to aid the audit team's evaluation of compliance with standards. The audit team reviewed and evaluated all information provided by PSE&G to assess compliance with standards applicable to the TO, DP and LSE functions.

Based on the information and documentation provided by PSE&G, the audit team made the following determinations: six (6) requirements in three (3) NERC Reliability Standards were determined to be not applicable to PSE&G; PSE&G was found to be compliant with thirty seven (37) of thirty eight (38) applicable requirements and nineteen (19) of twenty (20) applicable NERC Reliability Standards. The audit team identified one (1) possible compliance violation associated with one (1) NERC Reliability Standard. A possible compliance violation was identified for PRC-005-1, R2 and sub-requirement R2.1.

These results and the basis for the possible violation are further explained in the Audit Results Findings section of this report which includes detailed information of the audit team's determination of applicability and compliance for the Reliability Standards within the scope of the compliance audit. This information may be used to help determine the severity level of possible sanctions and penalties. The possible compliance violations will be processed through the NERC and Reliability *First* Compliance Monitoring and Enforcement Program (CMEP). Any further actions related to possible compliance violations will be through the CMEP process.

There were no ongoing mitigation plans and therefore none were reviewed by the audit team.

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Audit Process

The compliance audit process steps are detailed in the NERC and ReliabilityFirst Compliance Monitoring and Enforcement Programs (CMEP). The NERC and ReliabilityFirst CMEP generally conform to the United States Government Accountability Office Government Auditing Standards and other generally accepted audit practices.

Objectives

All registered entities are subject to audit for compliance with all Reliability Standards applicable to the functions for which the entity is registered. The audit objectives are to:

- Review PSE&G's compliance with the requirements of Reliability Standards that are applicable to PSE&G, based on the functions that PSE&G is registered to perform.
- Validate compliance with applicable Reliability Standards from the NERC 2008 Implementation Plan list of actively monitored standards, and additional NERC Reliability Standards selected by ReliabilityFirst.
- Validate compliance with applicable Regional Standards from the ReliabilityFirst 2008 Implementation Plan list of actively monitored standards.
- Validate evidence of self-reported violations and previous self-certifications, confirm compliance with other applicable Reliability Standards, and review the status of associated mitigation plans.
- Document the compliance culture and the compliance program of PSE&G.

Scope

The scope of the compliance audit included applicable NERC Reliability Standards in the NERC 2008 Implementation Plan and applicable Regional Standards from the ReliabilityFirst 2008 Implementation Plan.

At the time of the audit, PSE&G was registered for the functions of Transmission Owner (TO); Distribution Provider (DP) and Load Serving Entity (LSE). The audit team evaluated PSE&G for compliance with twenty three (23) NERC Reliability Standards for the period of June 18, 2007 to November 19, 2008.

Confidentiality and Conflict of Interest

Confidentiality and Conflict of Interest of the audit team are governed under the ReliabilityFirst Delegation Agreement with NERC, and Section 1500 of the NERC Rules of Procedure. PSE&G was informed of the ReliabilityFirst obligations and responsibilities under the agreement and procedures. The work history for each audit team member was provided to PSE&G. PSE&G was given an opportunity to object to an audit team member's participation on the basis of a

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possible conflict of interest or the existence of other circumstances that could interfere with an audit team member's impartial performance of duties. PSE&G had not submitted any objections by the stated fifteen day objection due date and accepted the audit team member participants without objection.

On-site Audit

PSE&G is currently subject to a compliance audit at a minimum of once every three years. PSE&G was provided with a sixty (60) day notification of this scheduled audit and at that time, all necessary documents required by the ReliabilityFirst audit process were provided. The following documents were provided to PSE&G as part of the notification:

- 60-day Notification letter which contained a request for evidence, information and data submittals
- Compliance Audit Survey
- Internal Compliance Program Survey
- Audit Agenda as applicable
- Audit Team Work History with discussion of objection process
- General Instructions for Data or Information Submittals
- Reliability Standard Auditor Worksheets (RSAWs)
- Reliability Standard Questionnaires

Documents were provided to PSE&G in both electronic and hardcopy format.

ReliabilityFirst discussed the usage of technical experts with PSE&G and allowed their use as deemed necessary by PSE&G to provide the audit team an understanding of the evidence provided to demonstrate their compliance to the standards.

An audit agenda was provided to PSE&G in advance to allow the necessary time to prepare for the audit. PSE&G's cooperation and flexibility with the agenda was appreciated by the audit team.

At times, and according to the generally accepted government auditing standard 3.31, auditors are required to use professional judgment in planning, performing audits, attestation engagements and in reporting the results.

Additionally, and with the generally accepted government auditing standard 3.39, while this standard places responsibility on each auditor and audit organization to exercise professional judgment in planning and performing an audit or attestation engagement, it does not imply unlimited responsibility, nor does it imply infallibility on the part of either the individual auditor or the audit organization.

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Professional judgment does not mean eliminating all possible limitations or weaknesses associated with a specific audit, but rather identifying, considering, minimizing, mitigating, and explaining them.

Methodology

ReliabilityFirst staff conducted the audit on-site at the PSE&G offices in Newark, New Jersey. The audit team reviewed the information, evidence and data submitted by PSE&G and assessed compliance with requirements of applicable Reliability Standards. The audit team requested and received additional information and sought clarification from subject matter experts when the audit team determined it was necessary.

Opening Briefing

An Opening Briefing was conducted on November 18, 2008 in the PSE&G offices utilizing a PowerPoint presentation to discuss the following:

- Introduction of audit team
- Audit Objective and Scope
- Team Audit Expectations
- Discussion on Clarification Issues
- Audit Process
- Exit Briefing and schedule

Audit

The Audit team consisted of four ReliabilityFirst Compliance staff members, a contract auditor and a NERC observer. A ReliabilityFirst Compliance staff member was designated as the audit team lead responsible for facilitating the audit process, serving as the primary contact person for the audit team, and completing the audit report. The audit team worked together to review evidence provided by PSE&G and assessed compliance with the requirements of the standards that were audited. Requests for additional information, verification and clarification were communicated to the PSE&G primary contact throughout the audit process. PSE&G was NOT permitted to create new documents and/or edit existing material and/or documents that were previously provided as evidence.

Exit Briefing

The audit team conducted an exit briefing with PSE&G on November 19, 2008 utilizing a PowerPoint presentation. The primary and alternate compliance contacts, Vice President – Asset Management & Centralized Services, Director – Transmission Business Strategy and subject matter experts for PSE&G participated in the exit briefing. The status of the on-site audit process was discussed, followed by audit scope, preliminary audit findings and compliance audit report

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process. The possible violation identified during the audit was discussed with the preliminary results. PSE&G was provided an opportunity to ask questions that the audit team addressed.

Company Profile

Public Service Electric and Gas Company (PSE&G) is one of the largest combined electric and gas companies in the United States and is also New Jersey's oldest and largest publicly owned utility. The Public Service Corporation was formed in 1903 by amalgamating more than 400 gas, electric and transportation companies in New Jersey. It was renamed Public Service Electric and Gas Company in 1948. PSE&G is the largest subsidiary of Public Service Enterprise Group Incorporated (PSEG).

PSE&G currently serves nearly three quarters of New Jersey's population in a service area consisting of a 2,600-square-mile diagonal corridor across the state from Bergen to Gloucester Counties.

PSE&G serves 1.7 million gas customers and 2.1 million electric customers in more than 300 urban, suburban and rural communities, including New Jersey's six largest cities. PSE&G remains primarily a Federal- and State-regulated gas and electric delivery company.

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Audit Specifics

The compliance audit was conducted from November 18, 2008 to November 19, 2008 at the PSE&G offices in Newark, New Jersey.

Audit Team Participants

Audit Team Role	Title	Company
Team Lead	Senior Compliance Engineer	ReliabilityFirst
Team Member	Senior Engineer	ReliabilityFirst
Team Member	Paralegal, Compliance Enforcement	ReliabilityFirst
Team Member	Manager of Compliance Audits	ReliabilityFirst
Team Member	Consultant	ReliabilityFirst
Team Member/Observer	Regional Compliance Program Coordinator	NERC

PSE&G Audit Participants

Title	Organization
Vice President – Asset Management & Centralized Services	PSE&G
Vice President – Electric Operations	PSE&G
Director – Asset Reliability	PSE&G
Director – Electric Delivery Planning	PSE&G
Director – Transmission Business Strategy	PSE&G
Manager – ERO/RE Policy & Standards Interface	PSE&G
Industry Analysis Manager ERO/RE	PSE&G
Consultant – Transmission Business Strategy	PSE&G
Manager – Electric System Operations	PSE&G
Manager – System Reliability	PSE&G
Manager – Vegetation Management	PSE&G
Information Protection Manager	PSE&G
Manager – Enterprise Homeland Security Operations	PSE&G
System Protection Manager	PSE&G
General Regulatory Counsel – Operations and Compliance	PSE&G
Principal Staff Engineer – Transmission Planning	PSE&G
Engineer – System Reliability	PSE&G
System Protection - Engineer	PSE&G
Principal Consultant - PDC Inc.	PSE&G

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Audit Results

The audit team evaluated PSE&G's compliance with forty four (44) requirements in twenty three (23) NERC Reliability Standards for the period since June 18, 2007. The audit team used data provided by PSE&G to determine compliance with the standards. Based on the information provided by PSE&G, of the twenty three (23) Reliability Standards audited, six (6) requirements in three (3) NERC Reliability Standards were determined to be not applicable. PSE&G was found to be compliant with thirty seven (37) of thirty eight (38) applicable requirements and nineteen (19) of twenty (20) applicable NERC Reliability Standards. The audit team found PSE&G to have a possible violation of one (1) requirement in one (1) NERC Reliability Standards.

The audit team carefully and methodically reviewed the submitted evidence and discussed findings as a team to determine if the evidence met the requirements of the Reliability Standards. If the evidence was inadequate or did not cover all of the requirements in the Reliability Standard, the audit team asked for additional evidence and/or clarification. PSE&G provided a primary compliance contact and subject matter experts for clarification during the audit. Throughout the audit, the audit team members took notes on findings of evidence of compliance.

The audit team reviewed documentation in hardcopy and electronic forms provided by PSE&G.

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Findings

The following table details the findings for compliance with the Reliability Standards listed in the NERC 2008 Implementation Plan and/or selected for this audit:

Reliability Standard	Requirement	Finding
BAL-005-0	R1.	Compliant
CIP-001-1	R1.	Compliant
CIP-001-1	R2.	Compliant
CIP-001-1	R3.	Compliant
CIP-001-1	R4.	Compliant
EOP-002-2	R9.	Compliant
EOP-004-1	R2.	Compliant
EOP-004-1	R3.	Compliant
FAC-003-1	R1.	Compliant
FAC-003-1	R2.	Compliant
FAC-003-1	R3.	Compliant
FAC-008-1	R1.	Compliant
FAC-008-1	R2.	Compliant
FAC-008-1	R3.	Compliant
FAC-009-1	R1.	Compliant
FAC-009-1	R2.	Compliant
IRO-001-1	R8.	Compliant
IRO-004-1	R4.	Compliant
IRO-005-1	R13.	Compliant
MOD-010-1	R1.	Compliant
MOD-010-0	R2.	Compliant
MOD012-0	R1.	Compliant
MOD-012-0	R2.	Compliant
MOD-017-0	R1.	Compliant
MOD-019-0	R1.	Compliant
PRC-004-1	R1.	Compliant
PRC-004-1	R3.	Compliant
PRC-005-1	R1.	Compliant
PRC-005-1	R2.	Possible Violation
PRC-008-0	R1.	Compliant
PRC-008-0	R2.	Compliant
PRC-010-0	R1. & R2.	N/A
PRC-011-0	R1. & R2.	N/A
PRC-016-0	R1	Compliant
PRC-016-0	R2.	Compliant

Confidential Information (including Privileged and Critical Energy Infrastructure Information)
Has Been Removed

PRC-016-0	R3.	Compliant
PRC-017-0	R1.	Compliant
PRC-017-0	R2.	Compliant
PRC-021-1	R1. & R2.	N/A
TOP-002-2	R3.	Compliant
TOP-002-2	R18.	Compliant

Compliance Culture

Public Service Electric and Gas Company's ("PSE&G") internal compliance program is a part of its parent Public Service Enterprise Group Incorporated's corporate compliance program. PSE&G fosters a strong culture of compliance with all laws and regulations, and specifically, the PSE&G NERC Compliance Program has the attributes of executive support and sponsorship; an internal compliance structure and process with sufficient independence, resources and access to the CEO and Board of Directors; formal self-audits on a regular cycle; and training at an appropriate level for all employees affected by the Standards.

PSE&G recognizes the need to comply with all applicable laws and regulations to uphold its commitment to excellence in operations, and has thus implemented a top down approach to compliance to ensure that a culture of compliance is fostered throughout the organization. Accordingly, the PSE&G Compliance Council, formed several years ago and consisting of the Presidents of each line of business, meets regularly to oversee compliance throughout the organization. The comprehensive authority of the Compliance Council includes compliance with NERC Reliability Standards. As part of its responsibilities, the Compliance Council ensures that, where necessary, appropriate corrective action (which could include disciplinary action) is taken.

PSE&G compliance with NERC and Regional reliability standards is not new. The roots of the PSE&G program extend back to PSE&G participation in the formation of NERC in 1968, and, since that time, PSE&G has maintained active participation in NERC-related activities including at the NERC regional levels. PSE&G provided personnel to assist with the NERC standards Version 0 drafting effort, and when FERC issued its Notice of Proposed Rulemaking on Proposed Reliability Standards on October 19, 2006, PSE&G launched its reliability compliance program with two full-time employees (with auditing, engineering and legal experience) who had participated in NERC policy matters for several years. PSE&G then simply transitioned its existing NERC Standards Review Team to form the SRCT. Appropriate PSE&G Subject Matter Experts are members of this Team.

Attachment b

**Settlement Agreement by and between PSE&G
and ReliabilityFirst executed September 21, 2009**



In re)	DOCKET NUMBER
)	
PUBLIC SERVICE ELECTRIC)	RFC200800122
AND GAS COMPANY)	
)	
NERC Registry ID # NCR00896)	

**SETTLEMENT AGREEMENT
OF
RELIABILITYFIRST CORPORATION
AND
PUBLIC SERVICE ELECTRIC AND GAS COMPANY**

I. INTRODUCTION

1. ReliabilityFirst Corporation (“Reliability First”) and Public Service Electric and Gas Company (PSE&G) enter into this Settlement Agreement ("Agreement") to resolve all outstanding issues arising from a preliminary and non-public assessment resulting in ReliabilityFirst’s determination and findings, pursuant to the North American Electric Reliability Corporation (“NERC”) Rules of Procedure, of a violation by PSE&G of the NERC Reliability Standard PRC-005-1, Requirement 2.1.

II. STIPULATED FACTS

2. The facts stipulated herein are stipulated solely for the purpose of resolving between PSE&G and ReliabilityFirst the matters discussed herein and do not constitute stipulations or admissions for any other purpose. PSE&G and ReliabilityFirst hereby stipulate and agree to the following:

Background

3. PSE&G is the largest subsidiary of Public Service Enterprise Group Incorporated (PSEG). PSE&G currently serves nearly three quarters of New Jersey’s population in a service area consisting of a 2,600 mile diagonal corridor across the state from Bergen to Gloucester Counties. PSE&G serves 1.7 million gas customers and 2.1 million electric customers in more than 300 urban, suburban, and rural communities, including New Jersey’s six largest cities.

4. PSE&G is a Transmission Owner with Bulk Electric System (“BES”) transmission facilities at 500kV, 345kV, 230kV and 138kV. It does not currently own or operate any generation facilities.
5. During the time period the alleged violation occurred, PSE&G was registered on the NERC Compliance Registry as a Transmission Owner, Distribution Provider, and Load Serving Entity in the Reliability *First* region with the NERC Registry Identification Number NCR00896, and is, therefore, subject to compliance with PRC-005-1, Requirement 2.1.

Alleged Violation of PRC-005-1, Requirement 2.1 – RFC200800122

6. NERC Reliability Standard PRC-005-1, “Transmission and Generation Protection System Maintenance and Testing”, Requirement 2 states, “Each Transmission Owner and Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation Protection System shall provide documentation of its Protection System maintenance and testing program to its Regional Reliability Organization on request (within 30 calendar days). The documentation of the program implementation shall include:”

R2.1. “Evidence Protection System devices were maintained and tested within defined intervals.”

7. On September 2, 2008, PSE&G notified Reliability *First* by telephone that an internal self assessment performed by PSE&G, prior to a scheduled Compliance Audit, determined that clerical errors in converting from a manual to a computerized maintenance and testing program resulted in twenty-eight (28) Protection System devices, out of approximately 5,700 BES Protection System devices, without evidence available to verify that they were tested within the defined intervals. The prescribed interval for all twenty-eight (28) of the Protection System devices was to the last day of the fourth calendar year after the last maintenance and testing date. The total number of Protection System devices was subsequently reduced to sixteen (16) as described in paragraph 8 below. Due to the nature of the circumstances of converting documents to the new electronic database, Reliability *First* advised that PSE&G should immediately test the components to assure that they were operable and within specifications and to determine whether or not any of the affected devices experienced any misoperations. PSE&G subsequent to discovery of clerical errors immediately tested all of the subject components successfully, all within specifications, and determined there were no associated misoperations from these components.
8. On November 18 – 19, 2008, Reliability *First* conducted a Compliance Audit of PSE&G. The Reliability *First* Audit Team, upon review of the records from the September 2008 PSE&G self assessment, reported a Possible Alleged Violation of Reliability Standard PRC-005-1, Requirement 2.1. Specifically, an internal

self assessment performed by PSE&G determined that clerical errors in converting from a manual to a computerized maintenance and testing program resulted in lost evidence for twenty-eight (28) 230kV and above relays. PSE&G was able to locate test records for six (6) of those Protection System devices verifying that testing and maintenance was done within the defined intervals. PSE&G also identified that six (6) of these Protection System devices were included as a result of the changed BES definition. In May 2007, the definition of the Bulk Electric system (BES) was broadened by Reliability *First* to include any systems that would impact the grid at a voltage of 100 kV and above. Based on the premise that it would have been unreasonable and inequitable to expect that PSE&G would have applied the definition change retroactively for testing purposes, as it could not have anticipated the change before it occurred, interpreted the BES definition change as an “unforeseen circumstance”, thereby making it acceptable to perform maintenance beyond the specified interval, not to exceed an eighteen (18) month extension. The Reliability *First* Audit Team agreed with PSE&G’s interpretation during the audit. This left sixteen (16) Protection devices PSE&G was not able to verify that the testing and maintenance was completed within the defined intervals.

9. Each of the sixteen (16) Protection System devices without evidence available to verify that they were tested within defined intervals due to clerical errors when PSE&G converted from a manual to a computerized maintenance and testing program; tested within specifications, were found to be fully functional and operable, and there were no associated misoperations with these components. PSE&G was able to show that it had tested adjacent or associated Protection System devices at the same station, as is PSE &G’s practice for efficiency and cost effective maintenance, and that, as a result, the testing and maintenance of the devices in question was expected to have been completed as a group. Therefore, Reliability *First* has reason to believe these devices were probably tested contemporaneously with the adjacent devices. Therefore, the alleged violation was considered to be administrative in nature, and since all subject components were tested successfully, found to be fully functional and operable, and there were no associated misoperations, there was no immediate or identifiable risk to the reliability of the BES.
10. Subsequent to the Compliance Audit findings of November 18-19, 2008, and after Reliability *First* received notification from PSE&G of its intent to enter settlement discussions on April 27, 2009, PSE&G notified Reliability *First* on May 1, 2009 that during “walk down” inspections additional protection system devices that either were missing documentation of test interval or were miscoded in the electronic system had been identified. “Walk down” inspections are a thorough review of all Protection Systems to ensure all relevant devices are entered into the maintenance database and are properly coded. The “walk down” inspections were performed by PSE&G supervisory personnel, as prescribed in Phase 3 of PSE&G’s Mitigation Plan, at Transmission and Substation Facilities along with validation of one-line diagrams. The “walk down” inspection of the

BES facilities was completed on June 1, 2009 which resulted in the identification of an additional seventy-two (72) protection system devices that either were missing documentation of test interval or were miscoded in the electronic system due to clerical errors during the conversion from a manual to a computerized maintenance and testing program. This discovery brought the total to eighty-eight (88) Protection System devices, out of approximately 5,700 devices, that either were missing documentation of test interval or were miscoded in the electronic system due to clerical errors during the conversion from a manual to a computerized maintenance and testing program. The prescribed interval for eighty-five (85) of the devices was to the last day of the fourth calendar year after the last maintenance and testing date. The remaining three (3) Audio Tone Transfer Trip devices interval was the last day of the next calendar after the last maintenance and testing date. All protection system devices were tested immediately, found to be fully functional and operable, and there were no associated misoperations with these components.

11. Each of the additional seventy-two (72) Protection System devices without evidence available to verify that they were tested within defined intervals due to clerical errors when PSE&G converted from a manual to a computerized maintenance and testing program; tested within specifications, were found to be fully functional and operable, and there were no associated misoperations with these components. PSE&G was able to show that it had tested adjacent or associated Protection System devices at the same station, as is PSE&G's practice for efficiency and cost effective maintenance, and that, as a result, the testing and maintenance of the devices in question was expected to have been completed as a group. Therefore, Reliability *First* has reason to believe these devices were probably tested contemporaneously with the adjacent devices. Therefore, the alleged violation was considered to be administrative in nature, and since all subject components were tested successfully, found to be fully functional and operable, and there were no associated misoperations, there was no immediate or identifiable risk to the reliability of the BES.
12. On April 20, 2009, Reliability *First* sent PSE&G an Initial Notification of Alleged Violation informing PSE&G that Reliability *First* had determined there is sufficient basis for finding that PSE&G may not be or may not have been in compliance with Reliability Standard PRC-005-1, Requirement 2.1.
13. On April 24, 2009, a teleconference between representatives of Reliability *First* and PSE&G determined that PSE&G would like to explore settlement with Reliability *First*.
14. On April 27, 2009, Reliability *First* received a letter from PSE&G providing formal notice of its intention to commence settlement negotiations with Reliability *First* regarding NERC Violation ID Number RFC200800122.

15. On May 21, 2009, settlement negotiations began between Reliability *First* and PSE&G regarding NERC Violation ID Number RFC200800122.
16. Reliability*First* alleges that PSE&G failed to provide sufficient evidence regarding whether eighty-eight (88) Protection System devices were tested in accordance with PSE&G's program parameters.

III. PARTIES' SEPARATE REPRESENTATIONS

Statement of Reliability*First* and Summary of Findings

17. Reliability*First* considers this Agreement as the resolution of all issues, including all issues identified and mitigated as a result of performance of PSE&G's Mitigation Plan, with regard to the above captioned docket number and to bind PSE&G in the commitment to perform actions hereinafter enumerated and listed as conditions for this Agreement.
18. PRC-005-1, Requirement 2.1 has a Violation Risk Factor (VRF) of High as evidenced by the Violation Risk Factor Matrix.
19. Reliability*First* found PSE&G's Compliance Program to be outstanding. It is incorporated as a part of its parent PSEG's corporate compliance program. The Compliance Program at PSE&G has the attributes of executive support and sponsorship; internal compliance structure and process with sufficient independence, resources, and access to the CEO and Board of Directors; formal self audits on a regular cycle; and training at an appropriate level for all employees affected by the standards.
20. Due to the prompt notification of Reliability *First* by PSE&G of the potential noncompliance of Reliability Standard PRC-005-1, R 2.1, and the immediate testing of all protection system devices identified prior to the audit, PSE&G has been given credit for Self Reporting the twenty-eight (28) protection system devices identified in PSE&G's internal self assessment of the PSE&G Protection System Maintenance and Testing Program performed in August, 2008.
21. Reliability*First* agrees that this Agreement is in the best interest of the parties and in the best interest of bulk power system reliability.

Statement of Public Service Electric and Gas Company

22. PSE&G neither admits nor denies that the facts set forth and agreed to by the parties for purposes of this Agreement constitute violations of NERC Reliability Standard PRC-005-1, Requirement 2.1.

23. PSE&G states that in the 2001 time frame, PSE&G transitioned from a manual maintenance and testing work management program to an automated SAP work management system. While performing an internal self-assessment of the PSE&G Protection System Maintenance and Testing Program in August, 2008, PSE&G discovered that certain relays were either incorrectly entered into the system or not entered into the system at all, which resulted in PSE&G failing to have evidence documenting the maintenance and testing of sixteen (16) relays or components out of approximately 5,700 in accordance with PSE&G's Protection System Maintenance and Testing Program parameters. Subsequent to this discovery, PSE&G, as soon as practicable, maintained and tested all of the subject components. A subsequent root cause analysis by an independent consultant confirmed the PSE&G findings as to why the devices either were missing documentation of test interval or was miscoded in the electronic system.

PSE&G performed the conversion from a manual system to SAP in the 2001 time frame, long before the 2003 Blackout and long before mandatory compliance with NERC reliability standards. PSE&G's purpose was to enhance its maintenance and testing program to foster a high level of reliability and better ensure that necessary work was done on a timely basis. PSE&G's commitment to reliability is evidenced by its multiple PA Consulting ReliabilityOne awards. The ReliabilityOne award is given annually to utilities that have excelled in delivering reliable electric service to their customers. PSE&G was the Mid-Atlantic Region award winner consecutively for the last 7 years. It received the National Reliability Excellence award for 3 out of the last 4 years including 2008.

Once the conversion to SAP was accomplished in the 2001 time frame, PSE&G believed in good faith that the conversion was properly executed and it was reasonable to rely on SAP going forward, as the data in SAP indicated that PSE&G was fully compliant. Indeed, PSE &G self-certified to MAAC in 2004 and 2006 and to Reliability *First* in September, 2006, based on SAP data, that it was in compliance with its maintenance and testing program. The relay supervisors involved with the SAP conversion retired not long after the conversion, and their replacements had no cause to suspect that the SAP data was not completely accurate. The data in SAP indicated that PSE&G was fully compliant.

Thereafter, when a new relay supervisor who was not present during the SAP conversion noticed possible omissions that triggered the September 2, 2008 call to Reliability *First*, PSE&G undertook a verification of proper data entry to SAP and a root cause analysis. One recommendation of that root cause analysis was to create and implement a process to verify all future changes to the BES protection system are properly entered into SAP so that the issue will not recur in the future. The walk-down associated with the root cause analysis led to the discovery of the 88 devices representing only 1-1/2 percent of the total of the approximately

5,700 BES protection system devices in the PSE&G protection system maintenance and testing program.

24. PSE&G was advised by Reliability *First* to verify in its PRC-005-1 compliance evidence that the subject components had all subsequently been maintained and tested within acceptable specifications and that there were no associated misoperations during the audit period. Accordingly, in the audit's supporting evidence for PRC-005-1 - Reference 4, the "Notes" column referred to the below notes for the subject components. The "Note 1" devices were miscoded as 'deferrable' through clerical error during the conversion to SAP commencing in 2001, and as a result were deferred in order to test and maintain BES devices after the dates of the last tests. The dates of deferral are not known as there is no annotation in SAP or elsewhere. As previously reported, all of these devices subsequently tested within specifications and there have been no misoperations due to these devices during the audit period. As a result, the bulk power system was never at risk.

Note 1 – The PSE&G Relay Testing and Maintenance program is managed by an SAP maintenance database. Each Order was given a priority. All bulk power relays should have a priority indicating that it is a priority and is non-deferrable. This order was incorrectly prioritized and was erroneously deferred. After discovering this issue, it was tested and maintained as soon as possible. Item tested within specifications and there were no misoperations due to this relay during the audit period. As a result, the Bulk power system was never at risk.

Note 2 – The PSE&G relay testing and maintenance program is managed by an SAP maintenance database. When the maintenance items were transferred to SAP from its previous format, this item was erroneously overlooked. After discovering this issue, this item was promptly put into the SAP system and it was tested and maintained as soon as possible. Item tested within specifications and there were no misoperations due to this relay during the audit period. As a result, the bulk power system was never at risk.

25. Each of the sixteen (16) devices, reported in September 2008 and subsequently identified in the compliance audit of November 18 & 19, 2008, tested within specifications and had no misoperations. In addition, for each of these sixteen (16) devices, PSE&G was able to show that it had tested adjacent or associated Protection System devices at the same station, as is PSE&G's practice for efficiency and cost effective maintenance, and that, as a result, the testing and maintenance of the devices in question was expected to have been completed as a group.
26. As indicated in paragraph #9 above, "walk down" inspections identified additional protection system devices that either were missing documentation of test interval or were miscoded in the electronic system. The "walk down" inspections were performed by PSE&G supervisory personnel, as prescribed in Phase 3 of PSE&G's Mitigation Plan, at Transmission and Substation Facilities

along with validation with one-line diagrams. . The “walk down” inspection of the BES facilities was completed on June 1, 2009 which resulted in an additional seventy-two (72) protection system devices that either were missing documentation of test interval or were miscoded in the electronic system which brought the total to eighty-eight (88) protection system devices that either were missing documentation of test interval or were miscoded in the electronic system. . All protection system devices were tested immediately, found to be fully functional and operable and there were no associated misoperations with these components.

27. PSE&G neither admits nor denies the facts set forth and agreed to by the parties for purposes of this Agreement constitute violations of PRC-005-1. Although PSE&G does not admit to, nor does it deny, the alleged violation, PSE&G has agreed to enter in to this Settlement Agreement with Reliability *First* to avoid extended litigation with respect to the matters described or referred to herein, to avoid uncertainty, and to effectuate a complete and final resolution of the issues set forth herein. PSE&G agrees that this agreement is in the best interest of the parties and in the best interest of continuing to maintain a reliable electric infrastructure.

IV. MITIGATING ACTIONS, REMEDIES AND SANCTIONS

28. During the month of August, 2008, PSE&G performed an internal self assessment of the PSE&G Protection System Maintenance and Testing Program and discovered that certain relays were either incorrectly entered into the computerized system or were not entered in to the system at all. This resulted in PSE&G failing to have evidence documenting the maintenance and testing of twenty-eight (28) relays or components that were either incorrectly entered into the computerized system or were not entered into the system at all in accordance with PSE&G's Protection System Maintenance and Testing Program parameters. Subsequent to the discovery, PSE&G maintained and tested all the subject components by September 23, 2008. All protection system devices were found to be fully functional and operable and there were no associated misoperations with these components.
29. On September 2, 2008, PSE&G notified Reliability *First* by telephone that an internal self assessment performed by PSE&G, prior to a scheduled Compliance Audit, determined that clerical errors in converting from a manual to a computerized maintenance and testing program resulted in twenty-eight (28) Protection System devices, out of approximately 5,700 BES Protection System devices, without evidence available to verify that they were tested within the defined intervals. The prescribed interval for all twenty-eight (28) of the Protection System devices was to the last day of the fourth calendar year after the last maintenance and testing date. Due to the nature of the circumstances of converting documents to the new electronic database, Reliability *First* advised that PSE&G should immediately test the components to assure that they were

operable and within specifications and to determine whether or not any of the affected devices experienced any misoperations. PSE&G subsequent to discovery of clerical errors immediately tested all of the subject components successfully, all within specifications, and determined there were no associated misoperations from these components. The testing of all twenty-eight (28) components was completed by September 23, 2008.

30. On November 18 – 19, 2008, Reliability *First* conducted a Compliance Audit of PSE&G. The Reliability *First* Audit Team, upon review of the records from the September 2008 PSE&G self assessment, reported a Possible Alleged Violation of Reliability Standard PRC-005-1, Requirement 2.1. Specifically, an internal self assessment performed by PSE&G determined that clerical errors in converting from a manual to a computerized maintenance and testing program resulted in lost evidence for twenty-eight (28) 230kV and above relays. PSE&G was able to locate test records for six (6) of those Protection System devices verifying that testing and maintenance was done within the defined intervals. PSE&G also identified that six (6) of these Protection System devices were included as a result of the changed BES definition. In May 2007, the definition of the Bulk Electric system (BES) was broadened by Reliability *First* to include any systems that would impact the grid at a voltage of 100 kV and above. Based on the premise that it would have been unreasonable and inequitable to expect that PSE&G would have applied the definition change retroactively for testing purposes, as it could not have anticipated the change before it occurred, interpreted the BES definition change as an “unforeseen circumstance”, thereby making it acceptable to perform maintenance beyond the specified interval, not to exceed an eighteen (18) month extension. The Reliability *First* Audit Team agreed with PSE&G’s interpretation during the audit. This left sixteen (16) Protection devices PSE&G was not able to verify that the testing and maintenance was completed within the defined intervals.
31. On April 20, 2009, Reliability *First* sent PSE&G an Initial Notification of Alleged Violation informing PSE&G that Reliability *First* had determined there is sufficient basis for finding that PSE&G may not be or may not have been in compliance with Reliability Standard PRC-005-1, Requirement 2.1.
32. On April 24, 2009, Reliability *First* and PSE&G discussed the Initial Notice of Alleged Violation and the potential of settlement discussions. During that discussion, PSE&G was advised that a Mitigation Plan could be submitted at any time since the Possible Alleged Violation had been mitigated.
33. On May 1, 2009, PSE&G submitted to Reliability *First* a Mitigation Plan to address the Alleged Violation set forth in this agreement.
34. Subsequent to the Compliance Audit findings of November 18-19, 2008, and after Reliability *First* received notification from PSE&G of its intent to enter settlement discussions on April 27, 2009, PSE&G notified Reliability *First* on

May 1, 2009 that during “walk down” inspections additional protection system devices that either were missing documentation of test interval or were miscoded in the electronic system had been identified. “Walk down” inspections are a thorough review of all Protection Systems to ensure all relevant devices are entered into the maintenance database and are properly coded. The “walk down” inspections were performed by PSE&G supervisory personnel, as prescribed in Phase 3 of PSE&G’s Mitigation Plan, at Transmission and Substation Facilities along with validation of one-line diagrams. The “walk down” inspection of the BES facilities was completed on June 1, 2009 which resulted in the identification of an additional seventy-two (72) protection system devices that either were missing documentation of test interval or were miscoded in the electronic system due to clerical errors during the conversion from a manual to a computerized maintenance and testing program. This discovery brought the total to eighty-eight (88) Protection System devices, out of approximately 5,700 devices, that either were missing documentation of test interval or were miscoded in the electronic system due to clerical errors during the conversion from a manual to a computerized maintenance and testing program. The prescribed interval for eighty-five (85) of the devices was to the last day of the fourth calendar year after the last maintenance and testing date. The remaining three (3) Audio Tone Transfer Trip devices interval was the last day of the next calendar year after the last maintenance and testing date. All protection system devices were tested immediately, found to be fully functional and operable, and there were no associated misoperations with these components.

35. Each of the additional seventy-two (72) Protection System devices without evidence available to verify that they were tested within defined intervals due to clerical errors when PSE&G converted from a manual to a computerized maintenance and testing program; tested within specifications, were found to be fully functional and operable, and there were no associated misoperations with these components.
36. On May 26, 2009, PSE&G submitted a revised Mitigation Plan incorporating the changes as discussed during the May 21, 2009 meeting between Reliability *First* and PSE&G. The revised Mitigation Plan reduced the original twenty-eight (28) protection system devices identified during PSE&G’s internal self assessment to the sixteen (16) protection system devices that were identified as not having evidence of maintenance and testing during the November 18-19, 2008 Compliance Audit. The revised Mitigation Plan also stated that if any additional missing or miscoded protection system devices were identified through the “walk down” inspection process, the necessary maintenance and testing would be completed no later than June 30, 2009. This revised Mitigation Plan was accepted by Reliability *First* on June 3, 2009. Set forth below are the milestones for the Plan and the status to date:

Activity To Be Completed	Completed By
Phase I – Enter devices not entered or miscoded into SAP and perform maintenance and testing as soon as practicable per the PSE&G Protection System Maintenance and Testing Program.	Completed
Phase II – Completion of Consultant Root Cause Analysis Report	Completed.
Phase III – Conduct a “walk down” of all BES Facilities to verify all devices are in SAP Work Management System; schedule maintenance and testing of any identified devices as soon as practicable thereafter as described in the adjacent column.	Completed

37. PSE&G shall pay a monetary penalty of \$5,000 to Reliability *First*. Reliability *First* will provide PSE&G with an invoice within twenty days after the Agreement is either approved by the Federal Energy Regulatory Commission or by operation of law, and Reliability *First* shall notify the North American Electric Reliability Corporation (NERC) if the payment is not received.
38. In order to facilitate Reliability *First*'s need to communicate the status and provide accountability to the ERO (NERC), PSE&G, if applicable, will provide status updates at a minimum quarterly or, if requested by Reliability *First*, more frequently. PSE&G will submit these status updates to Reliability *First* in accordance with the confidentiality provisions of Section 1500 of the NERC Rules of Procedure.
39. It is understood that Reliability *First* staff shall audit the progress of mitigation plans and any other remedies of this Agreement, including, but not limited to site inspection, interviews, and request other documentation to validate progress and/or completion of the mitigation plans and any other remedies of this Settlement Agreement. Reliability *First* shall reasonably coordinate audits and information requests with PSE&G related to this Agreement.
40. Based on the above actions taken or to be taken by PSE&G, PSE&G shall pay \$5,000 to Reliability *First* at the time as stated in this Agreement. However, if PSE&G fails to complete the actions described above, Reliability *First* reserves the right to assess and collect a monetary penalty, to impose a sanction or otherwise to impose enforcement actions. PSE&G shall retain all rights to defend against such additional enforcement actions in accordance with NERC Rules of Procedure.

41. Failure to make a timely penalty payment or to comply with any of the terms and conditions agreed to herein, or any other conditions of this Agreement, shall be deemed to be either the same alleged violations that initiated this Agreement and/or additional violation(s) and may subject PSE&G to new or additional enforcement, penalty or sanction actions in accordance with the NERC Rules of Procedure.
42. If PSE&G does not make the monetary penalty payment above at the times agreed by the parties, interest payable to ReliabilityFirst will begin to accrue pursuant to the Commission's regulations at 18 C.F.R. § 35.19(a)(2)(iii) from the date that payment is due, in addition to the penalty specified above.
43. Penalty monies only may be an offset to the overall budget of ReliabilityFirst and may not be an offset to a specific line item of the budget.
44. The terms and conditions of the Agreement are consistent with the regulations and orders of the Commission, as well as with the NERC Rules of Procedure.

V. ADDITIONAL TERMS

45. The signatories to the Agreement agree that they enter into the Agreement voluntarily and that, other than the recitations set forth herein, no tender, offer or promise of any kind by any member, employee, officer, director, agent or representative of ReliabilityFirst or PSE&G has been made to induce the signatories or any other party to enter into the Agreement.
46. ReliabilityFirst shall report the terms of all settlements of compliance matters to NERC. NERC will review the Agreement for the purpose of evaluating its consistency with other Agreements entered into for similar violations or under other, similar circumstances. Based on this review, NERC will either approve the Agreement or reject the settlement and notify ReliabilityFirst and PSE&G of changes to the Agreement that would result in a approval. If NERC rejects the Agreement, NERC will provide specific written reasons for such rejection and ReliabilityFirst will attempt to negotiate a revised Agreement with PSE&G including any changes to the Agreement specified by NERC. If a settlement cannot be reached, the enforcement process shall continue to conclusion. If NERC approves the Agreement, NERC will (i) report the approved Agreement to the Commission for the Commission's review and approval by order or operation of law and (ii) publicly post the alleged violation and the terms provided for in the Agreement.
47. This Agreement shall become effective upon the Commission's approval of the Agreement by order or operation of law as submitted to it or as modified in a manner acceptable to the parties.

48. PSE&G agrees that this Agreement, when approved by NERC and the Commission, shall represent a final settlement of all matters set forth herein and PSE&G waives its right to further hearings and appeal, unless and only to the extent that PSE&G contends that any NERC or Commission action on the Agreement contains one or more material modifications to the Agreement. ReliabilityFirst reserves all rights to initiate enforcement, penalty or sanction actions against PSE&G in accordance with the NERC Rules of Procedure in the event that PSE&G fails to comply with the Mitigation Plan and compliance program agreed to in this Agreement. In the event PSE&G fails to comply with any of the stipulations, remedies, sanctions or additional terms, as set forth in this Agreement, ReliabilityFirst will initiate enforcement, penalty, or sanction actions against PSE&G to the maximum extent allowed by the NERC Rules of Procedure, up to the maximum statutorily allowed penalty. PSE&G shall retain all rights to defend against such enforcement actions, also according to the NERC Rules of Procedure.
49. PSE&G consents to the use of ReliabilityFirst's determinations, findings, and conclusions set forth in this Agreement for the purpose of assessing the factors, including the factor of determining the company's history of violations, that are set forth in the May 15, 2008 Revised Policy Statement on Enforcement,¹ or that may be set forth in any successor policy statement or order. Such use may be in any enforcement action or compliance proceeding undertaken by ReliabilityFirst, provided however, that PSE&G does not consent to the use of the specific acts set forth in this Agreement as the sole basis for any other action or proceeding brought by ReliabilityFirst, nor does PSE&G consent to the use of this Agreement by any other party in any other action or proceeding.
50. Each of the undersigned warrants that he or she is an authorized representative of the entity designated, is authorized to bind such entity and accepts the Agreement on the entity's behalf.
51. The undersigned representative of each party affirms that he or she has read the Agreement, that all of the matters set forth in the Agreement are true and correct to the best of his or her knowledge, information and belief, and that he or she understands that the Agreement is entered into by such party in express reliance on those representations, provided, however, that such affirmation by each party's representative shall not apply to the other party's statements of position set forth in Section III of this Agreement.
52. The Agreement may be signed in counterparts.

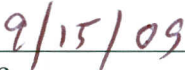
¹ Revised Policy Statement on Enforcement, 123 FERC ¶ 61,221 (2008).

53. The Agreement is executed in duplicate, each of which so executed shall be deemed to be an original.


Agreed to and accepted:



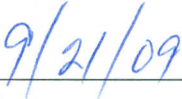
Raymond J. Palmieri
Vice President and Director of Compliance
ReliabilityFirst Corporation



Date



John R. Latka
VP – Electric Operations
Public Service Electric and Gas Company

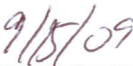


Date

Approved by:



Tim Gallagher
President
ReliabilityFirst Corporation



Date

Attachment c

PSE&G's Mitigation Plan designated as MIT-07-1758 for the alleged violation of PRC-005-1 R2.1, submitted May 1, 2009 and revised on May 26, 2009



Mitigation Plan Submittal Form

Date this Mitigation Plan is being submitted: May 1, 2009

Section A: Compliance Notices & Mitigation Plan Requirements

- A.1 Notices and requirements applicable to Mitigation Plans and this Submittal Form are set forth in "Attachment A - Compliance Notices & Mitigation Plan Requirements."
- A.2 This form must be used to submit required Mitigation Plans for review and acceptance by ReliabilityFirst and approval by NERC.
- A.3 ☒ I have reviewed Attachment A and understand that this Mitigation Plan Submittal Form will not be accepted unless this box is checked.

Section B: Registered Entity Information

- B.1 Identify your organization.

Company Name: Public Service Electric and Gas Company

Company Address: 80 Park Plaza – T13
Newark, NJ 07102-4106

NERC Compliance Registry ID: NCR00896

- B.2 Identify the individual in your organization who will be the Entity Contact regarding this Mitigation Plan.

Name: Jeffrey C. Mueller

Title: Manager ERO/RE Policy & Standards Interface

Email: Jeffrey.Mueller@PSEG.com

Phone: 973-430-8447



**Section C: Identification of Alleged or Confirmed Violation(s)
Associated with this Mitigation Plan**

C.1 This Mitigation Plan is associated with the following Alleged or Confirmed violation(s) of the reliability standard listed below.

NERC Violation ID #	Reliability Standard	Requirement Number	Violation Risk Factor	Alleged or Confirmed Violation Date ^(*)	Method of Detection (e.g., Audit, Self-report, Investigation)
RFC20080 0122	PRC-005-1	2.1	High	November 18, 2008	Compliance Audit

(*) Note: The Alleged or Confirmed Violation Date shall be expressly specified by the Registered Entity, and subject to modification by ReliabilityFirst, as: (i) the date the Alleged or Confirmed violation occurred; (ii) the date that the Alleged or Confirmed violation was self-reported; or (iii) the date that the Alleged or Confirmed violation has been deemed to have occurred on by ReliabilityFirst. Questions regarding the date to use should be directed to the ReliabilityFirst contact identified in Section G of this form.

C.2 Identify the cause of the Alleged or Confirmed violation(s) identified above. Additional detailed information may be provided as an attachment.

During PSE&G's good faith process improvement to convert from a paper-driven to an automated SAP record-keeping and work management mechanism for tens of thousands of transmission and distribution devices, a handful of BES records were inadvertently missed or mis-coded in the PSE&G SAP system.

Note: If a formal root cause analysis evaluation was performed, submit a copy of the summary report.

While PSE&G believes that it has identified the primary cause of the alleged violation, it has taken the additional step of engaging a consultant to perform a formal root cause analysis to determine if any other causes or contributory factors exist. The consultant's report is due by May 21, 2009.



- C.3 Provide any additional relevant information regarding the Alleged or Confirmed violations associated with this Mitigation Plan. Additional detailed information may be provided as an attachment.
- C.4

Following is a narrative description of the key facts associated with this matter.

In the 2001 time frame, PSE&G switched from a manual maintenance and testing work management program to an automated SAP work management system. While performing an internal self-assessment of the PSE&G Protection System Maintenance and Testing Program in August, 2008, PSE&G discovered that certain relays were either incorrectly entered into the system or not entered into the system at all, which resulted in PSE&G failing to have evidence documenting the maintenance and testing of certain relays or components in accordance with PSE&G's Protection System Maintenance and Testing Program parameters. Subsequent to this discovery, PSE&G, as soon as practicable, maintained and tested all the subject components.

PSE&G indicated in its PRC-005-1 compliance evidence that the subject components had all subsequently been maintained and tested within acceptable specifications and that there were no associated misoperations during the audit period. Accordingly, in the audit's supporting evidence for PRC-005-1 - Reference 4, the "Notes" column referred to the following notes for the subject components:

Note 1 – The PSE&G Relay Testing and Maintenance program is managed by an SAP maintenance database. Each Order was given a priority. All bulk power relays should have a priority indicating that it is a priority and is non-deferrable. This order was incorrectly prioritized and was erroneously deferred. After discovering this issue, it was tested and maintained as soon as possible. Item tested within specifications and there were no misoperations due to this relay during the audit period. As a result, the Bulk power system was never at risk.

Note 2 – The PSE&G relay testing and maintenance program is managed by an SAP maintenance database. When the maintenance items were transferred to SAP from its previous format, this item was erroneously overlooked. After discovering this issue, this item was promptly put into the SAP system and it was tested and maintained as soon as possible. Item tested within specifications and there were no misoperations due to this relay during the audit period. As a result, the bulk power system was never at risk.

PSE&G provided the audit team with a summary of the Protection System devices that were either not entered into SAP or not entered correctly. The summary showed that there were twenty-eight (28) Protection System devices without evidence available to verify that they were tested within the defined intervals.



PSE&G updated this information during the course of the on-site audit and in subsequent submissions. A final summary of the status of the twenty-eight (28) Protection System devices was provided by PSE&G in an email from Jeff Mueller PSE&G Manager - ERO/RE Policy & Standards Interface to Don Urban of ReliabilityFirst on November 26, 2008.

PSE&G was able to locate test records for six (6) of these Protection System devices verifying that the testing and maintenance was done within the defined intervals. PSE&G also identified that 6 of these Protection System devices were on the list as a result of the changed BES definition. In May 2007, the definition of Bulk Electric System ("BES") was broadened by RFC to include any systems that would impact the grid at a voltage of 100 kV and above. As a result of this changed definition, all relays that trip a BES facility became subject to the NERC relay protection standards. At the time that this definitional change occurred, PSE&G included these relays in its Protection System Maintenance and Testing Program, with the intent of ensuring that they would then be tested on a prospective basis in accordance with the Program requirements.

Based on the fact that (i) it would have been unreasonable and inequitable to expect that PSE&G would have applied this definitional change retroactively for testing purposes, as it could not have anticipated this change before it occurred; and (ii) per PSE&G's relay test manual, 10E1-2, Paragraph 7.3 dated 12/15/06 previously supplied to RFC as Ref 1 to the evidence for PRC-005-001, PSE&G interpreted the BES definitional change as an "unforeseen circumstance," thereby making it acceptable to perform maintenance beyond the specified interval, not to exceed an 18 month extension. In fact, all of those relays identified that could potentially trip a BES facility were tested within the allowable 18 month extension for "unforeseen circumstances." The RFC audit team agreed with PSE&G's interpretation during the Audit.

This left sixteen (16) Protection System devices where the audit team was unable to verify that the testing and maintenance was completed within the defined intervals. However, each of these sixteen (16) devices tested within specifications and had no misoperations. In addition, for each of these sixteen (16) devices, PSE&G was able to show that it had tested adjacent or associated Protection System devices at the same station, as is PSE&G's practice for efficiency and cost effective maintenance, and that, as a result, PSE&G asserted that the testing and maintenance of the devices in question was likely completed.

The audit team also recognized that PSE&G subsequently tested and maintained each of the sixteen (16) devices in question, and that testing and maintenance was completed on adjacent or associated Protection System devices within the defined interval consistent with PSE&G's relay maintenance practices.



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 Alleged or Confirmed violations identified above in Part C.1 of this form. Additional detailed information may be provided as an attachment.

Phase 1 of the Mitigation Plan – Address and Test 16 Protection System Devices

An internal self-assessment of records determined that clerical errors and omissions in converting from a manual to a computerized maintenance and testing work management program resulted in a lack of direct evidence for 16 protection System devices. As each device was located, maintenance and testing was performed as soon as practicable and all were found to be within specifications in accordance with the PSE&G Protection System and Maintenance and Testing Program. No misoperations have occurred on any of these devices.

Phase 2 of the Mitigation Plan - Engage Consultant to Conduct Root Cause Analysis

A formal root cause analysis will be completed by a third party vendor by May 21, 2009. The root cause analysis will determine the reason(s) that PSE&G was unable to supply documentary evidence for the 16 Protection System maintenance items identified above. The root cause analysis consultant will be tasked to make formal recommendations and to highlight opportunities for improvement with respect to PSE&G's Protection System Maintenance and Testing Program.

Phase 3 – Conduct a Walk-Down Review of All BES Facilities to Verify all Devices are Included and Properly Coded in the SAP Work Management System

Following the audit, PSE&G commenced and will complete a thorough review of all protection systems by June 15, 2009. The review is meant to ensure that all relevant devices are properly entered into the maintenance database and are properly coded. The review will be completed by the PSE&G division relay supervisors to ensure that all relay systems' components have an associated SAP maintenance item. The reviewer is tasked to compare the station one-line diagram (a drawing that includes all protection systems in service at the station) with a list of existing SAP maintenance items for the station. The reviewer will



then confirm that an SAP order exists for each protection system. Additionally, the reviewer will confirm that the order is properly prioritized in SAP. If any additional missing or mis-coded devices are identified, the necessary maintenance and testing will be completed as soon as practicable thereafter, but not later than June 30, 2009.

Mitigation Plan Timeline and Milestones

- D.2 Provide the date by which full implementation of the Mitigation Plan will be, or has been, completed with respect to the Alleged or Confirmed violations identified above. State whether the Mitigation Plan has been fully implemented, and/or whether the actions necessary to assure the entity has returned to full compliance have been completed.

As described above, Phase 1 of this Mitigation Plan was fully completed. The Phase 2 root cause analysis will be fully completed by May 21, 2009. The Phase 3 review, including mitigation by maintaining and testing any additional missing or mis-coded protection system devices, will be completed by June 30, 2009.

- D.3 Enter Key Milestone Activities (with due dates) that can be used to track and indicate progress towards timely and successful completion of this Mitigation Plan.

Key Milestone Activity	Proposed/Actual Completion Date* (shall not be more than 3 months apart)
<u>Phase 1</u> - Enter devices not entered or mis-coded into SAP, and perform maintenance and testing as soon as practicable per the PSE&G Protection System Maintenance and Testing Program	Completed
<u>Phase 2</u> - Completion of Consultant Root Cause Analysis Report	To be completed and provided to RFC on or before May 21, 2009
Phase 3 - Conduct a Walk-Down of all BES Facilities to Verify all Devices are in SAP Work Management System; schedule maintenance and testing of any identified devices as soon as practicable thereafter as described in the adjacent column.	The walkdown of BES Facilities will be completed on or before June 15, 2009. If any additional missing or mis-coded devices are identified, the necessary maintenance and testing will be completed as soon as practicable thereafter, but not later than June 30, 2009.



(*) Note: Additional violations could be determined for not completing work associated with accepted milestones.



Section E: Interim and Future Reliability Risk

Abatement of Interim BPS Reliability Risk

- E.1 While your organization is implementing this Mitigation Plan the reliability of the Bulk Power System (BPS) 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 to mitigate this increased risk to the reliability of the BPS. Additional detailed information may be provided as an attachment.

The fact pattern demonstrates that all sixteen (16) devices identified above were found to have tested within specifications and no misoperations of these devices occurred. Thus there was no possibility of actual harm to the bulk electric system and reliability was never adversely impacted or at increased risk.

Further, PSE&G's design of its bulk electric protection system builds in a significant degree of redundancy, so that in the event of a fault, there are backup systems in place to initiate a trip and protect the system.

Prevention of Future BPS Reliability Risk

- E.2 Describe how successful completion of this Mitigation Plan by your organization will prevent or minimize the probability that the reliability of the BPS incurs further risk of similar violations in the future. Additional detailed information may be provided as an attachment.

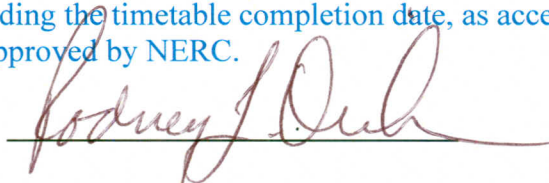
By ensuring that all BES protection system components are included in the PSE&G SAP work management system, work orders to test and maintain will be timely issued and completion of the work tracked, all in accordance with the requirements of the PSE&G Protection System Maintenance and Testing Program.

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 this Mitigation Plan for acceptance by ReliabilityFirst and approval by NERC, and
- b) If applicable, certifies that this Mitigation Plan was completed on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and
- c) Acknowledges:
 - 1. I am Vice President Asset Management & Centralized Services of Public Service Electric and Gas Company.
 - 2. I am qualified to sign this Mitigation Plan on behalf of Public Service Electric and Gas Company.
 - 3. I have read and am familiar with the contents of this Mitigation Plan.
 - 4. Public Service Electric and Gas Company agrees to comply with, this Mitigation Plan, including the timetable completion date, as accepted by ReliabilityFirst and approved by NERC.

Authorized Individual Signature



Name (Print):

Rodney L. Dickens

Title:

Vice President Asset Management & Centralized Services

Date:

May 1, 2009

Section G: Regional Entity Contact

Please direct completed forms or any questions regarding completion of this form to the ReliabilityFirst Compliance e-mail address mitigationplan@rfirst.org.

Please indicate the company name and reference the NERC Violation ID # (if known) in the subject line of the e-mail. Additionally, any ReliabilityFirst Compliance Staff member is available for questions regarding the use of this form. Please see the contact list posted on the ReliabilityFirst Compliance web page.



Attachment A – Compliance Notices & Mitigation Plan Requirements

- I. Section 6.2 of the CMEP¹ 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.
 - (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) Key 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.
- II. This submittal form must be used to provide a required Mitigation Plan for review and acceptance by ReliabilityFirst and approval by NERC.
- III. This Mitigation Plan is submitted to ReliabilityFirst and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.
- IV. This Mitigation Plan Submittal Form may be used to address one or more related Alleged or Confirmed violations of one Reliability Standard. A separate

¹ "Compliance Monitoring and Enforcement Program" of the ReliabilityFirst Corporation;" a copy of the current version approved by the Federal Energy Regulatory Commission is posted on the ReliabilityFirst website.



mitigation plan is required to address Alleged or Confirmed violations with respect to each additional Reliability Standard, as applicable.

- V. If the Mitigation Plan is accepted by ReliabilityFirst and approved by 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.
- VI. ReliabilityFirst or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.
- VII. Remedial action directives also may be issued as necessary to ensure reliability of the BPS.



DOCUMENT CONTROL

Title: Mitigation Plan Submittal Form
Issue: Version 2.0
Date: 11 July 2008
Distribution: Public
Filename: ReliabilityFirst Mitigation Plan Submittal Form - Ver 2.DOC
Control: Reissue as complete document only

DOCUMENT APPROVAL

Prepared By	Approved By	Approval Signature	Date
Robert K. Wargo Senior Consultant Compliance	Raymond J. Palmieri Vice President and Director Compliance	<i>Raymond J. Palmieri</i>	1/2/08

DOCUMENT CHANGE/REVISION HISTORY

Version	Prepared By	Summary of Changes	Date
1.0	Robert K. Wargo	Original Issue – Replaces “Proposed Mitigation Plan” Form	1/2/08
2.0 Tony	Purgar	Revised email address from compliance@rfirst.org to mitigationplan@rfirst.org	7/11/08

Attachment d

PSE&G's Certification of Completion of the Mitigation Plan for the alleged violation of PRC- 005-1 R2.1, submitted June 16, 2009

Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for ReliabilityFirst Corporation to verify completion of the Mitigation Plan. ReliabilityFirst Corporation may request 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)

Registered Entity Name: Public Service Electric and Gas Company

NERC Registry ID: NCR00896

Date of Submittal of Certification: June 16, 2009

NERC Violation ID No(s): RFC200800122

Reliability Standard and the Requirement(s) of which a violation was mitigated: PRC-005-1, Requirement 2.1

Date Mitigation Plan was scheduled to be completed per accepted Mitigation Plan: June 30, 2009

Date Mitigation Plan was actually completed: June 16, 2009

Additional Comments (or List of Documents Attached): none

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

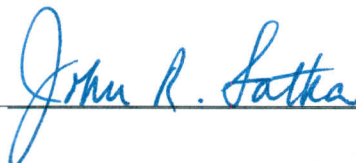
Name: John R. Latka

Title: Vice President Electric Operations

Email: John.Latka@PSEG.com

Phone: 973-430-5623

Authorized Signature



Date June 16, 2009


Please direct completed forms or any questions regarding completion of this form to the Reliability*First* Compliance e-mail address mitigationplan@rfirst.org.

Please indicate the company name and reference the NERC Violation ID # (if known) in the subject line of the e-mail. Additionally, any Reliability*First* Compliance Staff member is available for questions regarding the use of this form. Please see the contact list posted on the Reliability*First* Compliance web page.

DOCUMENT CONTROL

Title: Certification of Mitigation Plan Completion
Issue: Version 1
Date: 5 January 2008
Distribution: Public
Filename: Certification of a Completed Mitigation Plan_Ver1.doc
Control: Reissue as complete document only

DOCUMENT APPROVAL

Prepared By	Approved By	Approval Signature	Date
Robert K. Wargo Manager of Compliance Enforcement	Raymond J. Palmieri Vice President and Director Compliance		1/5/2009

DOCUMENT CHANGE/REVISION HISTORY

Version	Prepared By	Summary of Changes	Date
1.0	Robert K. Wargo	Original Issue	1/5/2009

Attachment e

ReliabilityFirst's Verification of Completion of the Mitigation Plan for the alleged violation of PRC- 005-1 R2.1, dated September 8, 2009



September 8, 2009

Summary and Review of Evidence of Mitigation Plan Completion

NERC Violation ID #:	RFC200800122
NERC Plan ID:	MIT-07-1758
Registered Entity;	Public Service Electric & Gas Company
NERC Registry ID:	NCR00896
Standard:	PRC-005-1
Requirements:	R2.1
Status:	Compliant

Review Process:

Public Service Electric & Gas Company (PSE&G) certified in its June 22, 2009 Certification of Mitigation Plan Completion that the Mitigation Plan for PRC-005-1, Requirement 2.1 has been completed. ReliabilityFirst requested and received evidence of completion for actions taken by PSE&G as specified in the Mitigation Plan. ReliabilityFirst performed an in-depth review and analysis of the information submitted to verify that all actions specified in the Mitigation Plan (MP) were successfully completed.

PRC-005-1 Requirement 2 states:

***R2.** Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation Protection System shall provide documentation of its Protection System maintenance and testing program and the implementation of that program to its Regional Reliability Organization on request (within 30 calendar days). The documentation of the program implementation shall include:*

***R2.1.** Evidence Protection System devices were maintained and tested within the defined intervals.*

Evidence Submitted:

Requirement R2.1.

PSE&G Relays with Maintenance and Testing Issues (pg 1-2) (Devices 1-28 with issues) and associated Relay Test Orders and test result sheets (pg 3-131)

(submitted May 21, 2009)

PSE&G Relays with Maintenance and Testing Issues (pg 1) (Devices 29-52 with issues) and associated Relay Test Orders and test result sheets (pg 2-61)

(submitted May 21, 2009)

PSE&G Relays with Maintenance and Testing Issues (pg 1) (Devices 53-100 with issues) and associated Relay Test Orders and test result sheets (pg 2-106)

(submitted June 22, 2009)

RFC200800122 MP Completion - Evidence Review (Response to review comments - submitted July 17, 2009)
Database Screenshots (pg1-4) (Additional evidence that was requested to corroborate RFC200800122 MP Completion - Evidence Review document - submitted July 23, 2009)

Mitigation Plan Completion

There are three Phases to the approved Mitigation Plan.

Phase 1 of the Mitigation Plan – Address and Test 16 Protection System Devices
An internal self-assessment of records determined that clerical errors and omissions in converting from a manual to a computerized maintenance and testing work management program resulted in a lack of direct evidence for 16 protection System devices. As each device was located, maintenance and testing was performed as soon as practicable and all were found to be within specifications in accordance with the PSE&G Protection System and Maintenance and Testing Program. No misoperations have occurred on any of these devices.

Phase 2 of the Mitigation Plan - Engage Consultant to Conduct Root Cause Analysis A formal root cause analysis will be completed by a third party vendor by May 21, 2009. The root cause analysis will determine the reason(s) that PSE&G was unable to supply documentary evidence for the 16 Protection System maintenance items identified above. The root cause analysis consultant will be tasked to make formal recommendations and to highlight opportunities for improvement with respect to PSE&G's Protection System Maintenance and Testing Program.

Phase 3 – Conduct a Walk-Down Review of All BES Facilities to Verify all Devices are Included and Properly Coded in the SAP Work Management System Following the audit, PSE&G commenced and will complete a thorough review of all protection systems by June 15, 2009. The review is meant to ensure that all relevant devices are properly entered into the maintenance database and are properly coded. The review will be completed by the PSE&G division relay supervisors to ensure that all relay systems' components have an associated SAP maintenance item. The reviewer is tasked to compare the station one-line diagram (a drawing that includes all protection systems in service at the station) with a list of existing SAP maintenance items for the station. The reviewer will then confirm that an SAP order exists for each protection system. Additionally, the reviewer will confirm that the order is properly prioritized in SAP. If any additional missing or mis-coded devices are identified, the necessary maintenance and testing will be completed as soon as practicable hereafter, but not later than June 30, 2009.

On May 21, 2009 and June 22, 2009, PSE&G submitted documents as evidence of the completion of Phases 1-3 of the Mitigation Plan.

Evidence Submitted:

PSE&G Relays with Maintenance and Testing Issues (pg 1-2) (Devices 1-28 with issues) and associated Relay Test Orders and test result sheets (pg 3-131) indicate latest testing date of 9/23/2008 was submitted May 21, 2009. ReliabilityFirst staff verified that none of the identified devices was on the 2007 or 2008 lists of misoperations. This completes MP Phase 1 (no scheduled milestone).

Root Cause Analysis for Relay Issues During RFC Audit of Public Service Electric and Gas Company (PSE&G) delivered in person to Dave Coyle on May 21, 2009 completes MP Phase 2 on schedule – May 21, 2009.

PSE&G Relays with Maintenance and Testing Issues (pg 1) (Devices 53-100 with issues) and associated Relay Test Orders and test result sheets (pg 2-106) indicating latest testing date of 6/12/2009 was submitted June 22, 2009. This completes MP Phase 3 on schedule – June 15, 2009 and June 30, 2009.

Review Results:

ReliabilityFirst Corporation reviewed the evidence the Public Service Electric & Gas Company submitted in support of its Certification of Completion. On September 8, 2009 ReliabilityFirst verified that the Mitigation Plan was completed in accordance with its terms and has therefore deemed Public Service Electric & Gas Company compliant to the aforementioned NERC Reliability Standard.

Respectf

ully Submitted,

Robert
Manager
Reliability



K. Wargo
of Compliance Enforcement
First Corporation

Attachment f

Notice of Filing

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Public Service Electric & Gas Company

Docket

No. NP10-____-000

NOTICE OF FILING
February 1, 2010

Take notice that on February 1, 2010, the North American Electric Reliability Corporation (NERC) filed a Notice of Penalty regarding Public Service Electric & Gas Company in the Reliability *First* 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, or call (866) 208-3676 (toll free). For TTY, call (202) 502-8659.

Comment Date: [BLANK]

Kimberly D. Bose,
Secretary