

February 12, 2010

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

Re: NERC Notice of Penalty regarding Duke Energy Carolinas, LLC, FERC Docket No. NP10- -000

Dear Ms. Bose:

The North American Electric Reliability Corporation (NERC) hereby provides this Notice of Penalty<sup>1</sup> regarding Duke Energy Carolinas, LLC (Duke),<sup>2</sup> NERC Registry ID# NCR01219,<sup>3</sup> in accordance with the Federal Energy Regulatory Commission's (Commission or FERC) rules, regulations and orders, as well as NERC Rules of Procedure including Appendix 4C (NERC Compliance Monitoring and Enforcement Program (CMEP)).<sup>4</sup>

On September 4, 2008, Duke self-reported a possible violation of PRC-005-1 Requirement (R) 2 to SERC for Duke's failure to maintain relays within its defined intervals. This Notice of Penalty is being filed with the Commission because, based on information from SERC, SERC and Duke have entered into a Settlement Agreement to resolve all outstanding issues arising from a preliminary and non-public assessment resulting in SERC's determination and findings of

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<sup>&</sup>lt;sup>1</sup> Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Electric Reliability Standards (Order No. 672), III FERC Stats. & Regs. ¶ 31,204 (2006); Notice of New Docket Prefix "NP" for Notices of Penalty Filed by the North American Electric Reliability Corporation, Docket No. RM05-30-000 (February 7, 2008). See also 18 C.F.R. Part 39 (2008). Mandatory Reliability Standards for the Bulk-Power System, FERC Stats. & Regs. ¶ 31,242 (2007) (Order No. 693), reh'g denied, 120 FERC ¶ 61,053 (2007) (Order No. 693-A). See 18 C.F.R § 39.7(c)(2).

denied, 120 FERC ¶ 61,053 (2007) (Order No. 693-A). See 18 C.F.R § 39.7(c)(2).

On October 14, 2009, NERC submitted an Omnibus filing which addressed violations for certain registered entities including Duke. On November 13, 2009, FERC issued an order stating it would not engage in further review of the violations addressed in the Omnibus Notice of Penalty. On December 19, 2008, NERC submitted a Notice of Penalty which addressed an alleged violation for Duke. On January 16, 2009, FERC issued an order stating it would not engage in further review of the alleged violation addressed in the December 19, 2008 Notice of Penalty.

SERC Reliability Corporation (SERC) confirmed that Duke was included on the NERC Compliance Registry as a Reserve Sharing Group, Planning Authority, Purchasing-Selling Entity, Generator Operator, Generator Owner, Distribution Provider, Resource Planner, Transmission Planner, Transmission Operator, Transmission Service Provider, Transmission Owner, Load Serving Entity and Balancing Authority on May 31, 2007, and as an Interchange Authority on March 20, 2008. As a Transmission Owner, Duke is subject to the requirements of NERC Reliability Standard PRC-005-1.

<sup>&</sup>lt;sup>4</sup> See 18 C.F.R § 39.7(c)(2).

the enforceable violation of PRC-005-1 R2. According to the Settlement Agreement, Duke admits to the violation and has agreed to the proposed penalty of ten thousand dollars (\$10,000) to be assessed to Duke, 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 violation identified as NERC Violation Tracking Identification Number SERC200800185 is a Confirmed Violation, as that term is defined in the NERC Rules of Procedure and the CMEP.

## **Statement of Findings Underlying the Violation**

This Notice of Penalty incorporates the findings and justifications set forth in the Settlement Agreement executed on September 17, 2009, by and between SERC and Duke, 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 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 (\$)
SERC	Duke Energy Carolinas, LLC	NOC- 378	SERC200800185	PRC-005-1	2	Lower/High	10,000

#### PRC-005-1

The purpose of Reliability Standard PRC-005-1 is to ensure all transmission and generation Protection Systems<sup>5</sup> affecting the reliability of the Bulk Power System (BPS) are maintained and tested.

PRC-005-1 R2 requires each Transm ission Owner, such as Duke, 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). The documentation of the program i mplementation shall include: (R 2.1) evidence that Protection System devices were maintained and tested with in the defined intervals, and (R2.2) the date that each Protection System device was last tested/maintained. PRC-005-1 R2 has a "Lower" Violation Risk Fact or (VRF); PRC-005-1 R2.1 and R2.2 each have a "High" VRF. 6

<sup>5</sup> Protection Systems is defined as "Protective relays, associated communication systems, voltage and current sensing devices, station batteries and DC control circuitry" in the *NERC Glossary of Terms Used in Reliability Standards*.

<sup>&</sup>lt;sup>6</sup> PRC-005-1 R2 has a "Lower" VRF; R2.1 and R2.2 have "High" VRFs. 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

On September 4, 2008, Duke filed a self-report stating that it had discovered that records could not be located to demonstrate that all of the twenty-three (23) BPS relays located in the Oconee 525/230 kV switchyard were maintained and/or tested per defined maintenance intervals. There were a total of 930 BPS and non-BPS relays.

On September 8, 2008, SERC Staff requested additional information supporting the claim and findings associated with Duke's internal investigation of the scope of the violation, specifically whether Duke had completed maintenance of the other relays at the Oconee station and whether a similar gap existed at other Duke stations where similar transfers of responsibility took place. On September 10, 2008, Duke responded to SERC and supplied the records supporting compliance with NERC Reliability Standard PRC-005-1 for other locations.

Based on its review, SERC found that in 1989 Duke had internally transferred responsibility for maintaining switchyards at Duke Nuclear Stations from Power Delivery (PD) to the Nuclear Generation Department (NGD). This transfer of responsibility included the maintenance and testing of 930 relays at three-similarly situated switchyards, including the 23 subject relays. However, the handoff to NGD's operations group at the Oconee switchyard resulted in a gap of maintenance and testing coverage for the 23 subject relays. The relay preventive maintenance (PM) records could not be found in either PD or NGD files for the following 23 relays:

- 6 525 kV breaker failure relays
- 6 525/230 kV Autobank differential relays
- 1 525/230 kV Autobank neutral overcurrent relay
- 3 230/4.16 kV Transformer phase overcurrent relays
- 2 230/4.16 kV Transformer neutral overcurrent relays
- 3 230/4.16 kV Transformer differential relays
- 1-230 kV breaker failure overcurrent relay
- 1-230 kV breaker failure timer relay

This transfer was successfully completed at two other similarly situated locations at the same time, as was confirmed by SERC's review of Duke's internal investigation.

SERC determined that the violation began on June 18, 2007, when the Reliability Standard became enforceable, and continued until September 21, 2008, when Duke completed its Mitigation Plan.

# Regional Entity's Basis for Penalty

According to the Settlement Agreement, SERC has assessed a penalty of ten thousand dollars (\$10,000) for the referenced violation. In reaching this determination, SERC considered: (1) Duke has had no prior violations of this Standard or any closely-related standard during the mandatory reliability period; (2) Duke cooperated in both a timely and satisfactory manner with SERC Staff during the investigation; (3) Duke agreed to resolve this issue via settlement and initiated various mitigation and preventative measures before receiving a Notice of Alleged

<sup>&</sup>quot;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.

Violation and Proposed Penalty or Sanction from SERC; (4) Duke provided prompt responses to all of SERC Staff's data requests and cooperated with SERC Staff during meetings between the parties to discuss these events; (5) Duke initiated its own internal investigation; (6) SERC Staff believes Duke has a well staffed and actively engaged compliance staff; (7) SERC Staff concluded that the violation did not create a serious or substantial risk to the reliability of the BPS, because only 23 BPS relay maintenance and testing records at one station out of 930 BPS and non-BPS relay maintenance and testing records at three stations could not be located; and (8) Duke provided additional supporting evidence showing these relays had sufficient redundancy that a reasonable scope of potential failures would not have resulted in the loss of the Oconee station or result in any instability within the BPS.

After consideration of these factors, SERC determined that, in this instance, the penalty amount of ten thousand dollars (\$10,000) is appropriate and bears a reasonable relation to the seriousness and duration of the violation.

# **Status of Mitigation Plan**<sup>7</sup>

Duke's Mitigation Plan to address its violation of PRC-005-1 R2 was submitted to SERC on September 4, 2008, with a proposed completion date of September 30, 2008. The Mitigation Plan was accepted by SERC on March 19, 2009 and approved by NERC on March 30, 2009. The Mitigation Plan for this violation is designated as MIT-07-1518 and was submitted as non-public information to FERC on April 1, 2009 in accordance with FERC orders.

Duke's Mitigation Plan required Duke to take the below actions. Duke completed the actions as follows:

- 1. Test ONS Breaker Failure Relays completed August 3, 2008
- 2. Test Autobank Relays completed August 14, 2008
- 3. Test Auxiliary Transformer Relays completed August 19, 2008
- 4. Test Relays associated with Power Circuit Breaker-4 completed August 19, 2008
- 5. Review all of the remaining relays related to the Oconee Switchyards to ensure no other relay maintenance/testing requirement were excluded during the 1989 transition. completed prior to August 19, 2008
- 6. Review the McGuire and Catawba Nuclear Stations to ensure all relays were included in the PM Program completed August 12, 2008.
- 7. Action Tracking Requests, which are the mechanism for the calibration/testing requirements inclusion in the PM program for NGD completed September 21, 2008.

In addition to the actions identified in the Mitigation Plan, Duke also implemented the following items to help prevent recurrence of any similar violation:

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<sup>&</sup>lt;sup>7</sup> See 18 C.F.R § 39.7(d)(7).

<sup>&</sup>lt;sup>8</sup> The Settlement Agreement incorrectly states that Duke submitted its Mitigation Plan on September 24, 2008 with an indication that it was complete.

- 1. Duke included all relays found to be missing records into its preventative maintenance tracking software to ensure future work orders are developed consistent with the maintenance intervals in its Protection System Maintenance and Testing Program. On September 25, 2008 Duke certified that its Mitigation Plan was completed as of September 21, 2008. As evidence of completion of its Mitigation Plan, Duke submitted the following:
  - 08-101 DEC (PRC-005) MP Evidence 09252008.pdf A screenshot illustrating all affected equipment is included in Duke's preventative maintenance program. This screenshot shows the inputs for preventative maintenance program for all relevant breaker failure relays, autobank protective relays and 4T protective relays.
  - 08-101 DEC (PRC-005) MP Evidence 032509.pdf Copies of work orders with the technician comments showing the maintenance and testing performed on each relevant relay.

On March 30, 2009, after reviewing Duke's submitted evidence, SERC verified that Duke's Mitigation Plan was complete and that Duke was in compliance with PRC-005-1 R2.

# Statement Describing the Proposed Penalty, Sanction or Enforcement Action Imposed 10 **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 SERC's imposition of a financial penalty, assessing a penalty of ten thousand dollars (\$10,000) against Duke 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 violation at issue.

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

- (1) Duke self-reported the violation;
- (2) SERC reported Duke was cooperative throughout the enforcement process;
- (3) there was no evidence of any attempt to conceal a violation nor evidence of intent to do so; and
- (4) SERC determined that the violation did not create a serious or substantial risk to the BPS because Duke's non-compliance was confined to the Oconee switchyard.

For the foregoing reasons, the NERC BOTCC approves the Settlement Agreement and believes that the proposed penalty of ten thousand dollars (\$10,000) is appropriate for the violations and

<sup>&</sup>lt;sup>9</sup> The evidence that was submitted as part of the Certification of Completion is not being included as part of this

<sup>&</sup>lt;sup>10</sup> See 18 C.F.R § 39.7(d)(4).

<sup>&</sup>lt;sup>11</sup> 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) Duke's self-report for the violation of PRC-005-1 R2 dated September 4, 2008, included as Attachment a;
- b) Settlement Agreement by and between Duke and SERC executed September 17, 2009, included as Attachment b;
  - i) Duke's Mitigation Plan designated as MIT-07-1518 for the violation of PRC-005-1 R2 submitted September 4, 2008, included as Appendix A-1 to the Settlement Agreement;
  - ii) Duke's Certification of Completion of the Mitigation Plan for the violation of PRC-005-1 R2 submitted September 25, 2008, included as Appendix A-2 to the Settlement Agreement; and
  - iii) SERC's Verification of Completion of the Mitigation Plan for the violation of PRC-005-1 R2 submitted March 29, 2009, included as Appendix A-3 to the Settlement Agreement.

## A Form of Notice Suitable for Publication 12

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

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

#### **Notices and Communications**

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

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

Jeffrey Trepel\*

Associate General Counsel

Duke Energy Carolinas, LLC

526 South Church Street (EC03T)

P.O. Box 1006

Charlotte, North Carolina 28202

(704) 382-8131

jtrepel@duke-energy.com

Karen Feld\*

Vice President Compliance and Service

Delivery

Duke Energy Carolinas, LLC

400 South Tryon Street (ST26V)

Charlotte, North Carolina 28285

(704) 382-8554

Karen.feld@duke-energy.com

Thomas P. Harrall, Jr\*

Vice President Field Operations - Carolinas

Duke Energy Carolinas, LLC

526 South Church Street (EC12ZA)

Charlotte, North Carolina 28202

(704) 382-3989

thomas.harrall@duke-energy.com

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

SERC Reliability Corporation

2815 Coliseum Centre Drive

Charlotte, NC 28217

Thomas J. Galloway\*

Interim President and CEO

(704) 940-8205

(704) 357-7914 – facsimile

tgalloway@serc1.org

Marisa A. Sifontes\*

Interim Compliance Director and Compliance

Legal Counsel

(704) 494-7775

(704) 357-7914 – facsimile

msifontes@serc1.org

Kenneth B. Keels, Jr.\*

Manager of Compliance Enforcement

(704) 940-8214

(704) 357-7914 – facsimile

kkeels@serc1.org

\*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.

#### **Conclusion**

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

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

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

Respectfully submitted,

/s/ Rebecca J. Michael

holly.hawkins@nerc.net

cc: Duke Energy Carolinas, LLC SERC Reliability Corporation

Attachments



# Attachment a

# Duke's self-report for the violation of PRC-005-1 R2 dated September 4, 2008



# SERC Reliability Corporation Self-Reporting / Complaint Form Template Revision 1 (10-25-07)

Report Type (please check): X Self-Report Complaint

Date of Report: 9/04/2008

NAME OF PERSON REPORTING POSSIBLE STANDAI	RD VIOLATION(S)
	CONTACT TELEPHONE
CONTACT NAME	CONTACT TELEPHONE  NUMBER
Michael Kuhl	513.287.3630
CONTACT E-MAIL	CONTACT FAX
Michael.kuhl@duke-energy.com	513.287.3812
REPORTING COMPANY NAME	ANONYMOUS? (Y/N)
Duke Energy Carolinas, LLC	N
NERC OR REGIONAL STANDARD(S) AND SPECIFIC REQUI	REMENT(S) POSSIBLY
NAME OF COMPANY POSSIBLY VIOLATING STANDARD(S)	ENTITY FUNCTION TYPE(S)
Duke Energy Carolinas, LLC	ТО
	DATE OF POSSIBLE
STANDARD # AND VERSION PRC-005-1 MEASURE / REQUIREMENT M2/R2	VIOLATION(S)
PRC-005-1 WIZ/RZ	September 4, 2008
POSSIBLE VIOLATION DESCRIPTION, REASON FOR COMPL	AINT OR OUESTION
FOSSIBLE VIOLATION DESCRIPTION, REASON FOR COMPLI	AINT, OR QUESTION
Records could not be located to demonstrate twenty-three (23) relays loc 525kV/230kV switchyard were maintained and/or tested per defined main	
RELIABILITY IMPACT (IF KNOWN)	
There was no reliability impact as the relays were recently tested and fou limits.	nd to be within acceptable

SERC Staff will contact the person providing the report as soon as possible. If you do not receive a response from SERC Staff within 2 business days please contact the SERC office (704-357-7372).

Please complete the form as completely as possible and email to <a href="mailto:serccomply@serc1.org">serccomply@serc1.org</a>.



# **Attachment b**

# Settlement Agreement by and between Duke and SERC executed September 17, 2009

## SETTLEMENT AGREEMENT

#### OF

## SERC RELIABILITY CORPORATION

#### **AND**

# DUKE ENERGY CAROLINAS, LLC

#### I. INTRODUCTION

1. SERC R eliability C orporation ("SERC") and Duke E nergy C arolinas, LLC ("Duke") e nter int o this S ettlement A greement ("Settlement A greement") to resolve all outstanding issues arising from a preliminary and non-public assessment resulting in SERC's determination and findings, pur suant to the North American Electric R eliability C orporation ("NERC") R ules of Procedure, of a violation by Duke of NERC R eliability S tandard PRC-005-1 (Transmission and G eneration Protection System Maintenance and Testing), Requirement 2 (SERC Tracking No. 08-101, NERC Violation ID No. SERC200800185).

#### II. STIPULATION

2. The f acts s tipulated herein are s tipulated s olely for t he pur pose of r esolving, between Duke and S ERC, t he m atters di scussed he rein a nd do not constitute stipulations or admissions for any other purpose. Duke and SERC hereby stipulate and agree to the following:

#### **Background**

- 3. Duke E nergy C arolinas, LLC is a regulated public ut ility e ngaged in the generation, transmission, distribution, and sale of e lectricity to retail and wholesale customers in North C arolina and S outh C arolina. In North C arolina and South Carolina, its facilities serve approximately 2.2 million customers with a generating capability of a pproximately 19,900 MW. Its principal executive offices are located in Charlotte, North Carolina.
- 4. Duke is c urrently listed on the NERC C ompliance R egistry as a Balancing Authority, T ransmission O wner, T ransmission S ervice P rovider, T ransmission Operator, Interchange Authority, T ransmission P lanner, Resource P lanner, Distribution P rovider, Generator O wner, Generator O perator, Load S erving

- Entity, Purchasing Selling Entity, Planning Authority and Reserve Sharing Group (NCR01219). This violation is a ssociated with Duke's r egistration as a Transmission Owner
- 5. Duke, as a Transmission Owner, owns a 525/230 kV transmission switchyard that connects the Oconee Nuclear Station to its transmission system. This switchyard includes r elays t hat a re components of a Protection S ystem, as d efined in t he *NERC Glossary of Terms used in Reliability Standards* and are therefore subject to the requirements contained in NERC Reliability Standard PRC-005-1.

# Violation of NERC Reliability Standard PRC-005-1, Requirement 2

- 6. The pur pose of NERC R eliability S tandard PRC-005-1 is "[to] ensure al 1 transmission and generation Protection Systems a ffecting the reliability of the Bulk Electric System (BES) are maintained and tested." Requirement 2 of the Standard requires each Transmission Owner that owns a transmission Protection System to provide documentation of its P rotection System maintenance and testing program and the implementation of that program, including evidence that its P rotection System de vices were maintained and tested within the defined intervals, as well as the date each Protection System de vice was last tested and maintained.<sup>1</sup>
- 7. On September 4, 2008, D uke c ontacted S ERC S taff t o di scuss t he p ending submittal of a self-report. D uke ha d uppe r m anagement a nd s ubject matter experts a vailable t o e xplain t he pe nding f iling a nd t o a llow S ERC Staff a n opportunity to ask any questions related to its submittal.
- 8. On September 4, 2008, Duke filed a self-report stating that it had discovered that records could not be located to demonstrate twenty-three (23) relays located in the Oconee 525/230 kV s witchyard w ere m aintained a nd/or t ested pe r defined maintenance intervals.
- 9. After confirming Duke's NERC registration status, SERC Staff commenced its detailed compliance a ssessment. On September 5, 2008, SERC Staff issued to Duke a Compliance Assessment Notice advising Duke of the initiation of a formal assessment to determine its compliance status for NERC Reliability Standard PRC-005-1, Requirement 2. SERC Staff also directed Duke to preserve all relevant records and information. SERC Staff promptly established direct contact with representatives of Duke to begin the process of gathering information and documentation for the detailed compliance assessment. SERC Staff reported the

<sup>&</sup>lt;sup>1</sup> NERC Reliability Standard PRC-005-1 – Transmission and Generation Protection System Maintenance and Testing, approved by NERC Board of Trustees on May 2, 2006, approved by FERC effective June 18, 2007.

possible violation to NERC on September 12, 2008, which, in turn, reported the possible violation to the Federal Energy Regulatory Commission ("Commission") in accordance with the Compliance Monitoring Enforcement Program ("CMEP") of the NERC Rules of Procedure.

- 10. On September 8, 2008, S ERC Staff requested additional information supporting the claim and findings associated with Duke's internal investigation of the scope of the violation, specifically whether D uke had completed maintenance of the other relays at the Oconee station and whether a similar gap existed at other Duke stations. On September 10, 2008, D uke responded to SERC and supplied the records supporting compliance with NERC Reliability Standard PRC-005-1 for other locations where similar circumstances created a situation where a similar violation could have been present.
- 11. Based on its review, SERC found that prior to June 18, 2007, Duke had internally transferred responsibility for the maintenance and testing of the 23 subject relays from its transmission group to the nuclear operations group. However, the handoff to the nuclear operations group resulted in a gap of maintenance and testing coverage for the 23 subject relays. This transfer was successfully completed at two other similarly situated locations at the same time, as was confirmed by Duke's internal investigation that was reviewed by SERC Staff.
- 12. SERC Staff concluded that the facts and evidence supported a finding that Duke violated NERC R eliability S tandard PRC-005-1, R equirement 2, because the evidence reviewed showed that Duke did not have evidence that its Protection System devices were maintained and tested within the defined intervals. Requirement 2 of NERC R eliability S tandard PRC-005-1 is as signed a "High" VRF consistent with the VRF filed by NERC and approved by the Commission. SERC Staff concluded that the actual or foreseeable risk to the reliability of the Bulk Power System ("BPS") as a result of this violation was minimal and did not pose a serious or substantial risk to the reliability of the BPS, as all 23 relays were tested and found to be operating properly and within specifications. If called upon to operate, these relays would have performed as designed to protect the generator and the BPS. Further, this issue concerned only 23 out of 930 relays reviewed at the three similarly-situated switchyards.
- 13. On August 14, 2009, Duke formally requested settlement di scussions f or t he resolution of the violations.

#### III. PARTIES' SEPARATE REPRESENTATIONS

# **Statement of SERC and Summary of Findings**

14. SERC finds that beginning on June 18, 2007 and continuing until September 21, 2008, the date that Duke completed testing of its relays, Duke, as a Transmission Owner, did not have evidence that 23 relays located in the subject switchyard

were te sted and maintained with its de fined intervals. This is a violation of NERC R eliability S tandard P RC-005-1, R equirement 2 for failing to have "[e]vidence P rotection System de vices were maintained and tested within the defined intervals."

- 15. SERC S taff c oncluded t hat t here w as no s erious or s ubstantial r isk t o the reliability of the BPS, as discussed above.
- 16. SERC agrees that this Settlement Agreement is in the best interest of the parties and in the best interest of BPS reliability.

#### **Statement of Duke**

- 17. Duke admits t hat t he facts s et f orth herein an d agreed to b y t he pa rties for purposes of this A greement constitute a violation of NERC Reliability Standard PRC-005-1, R equirement 2. D uke believes that this S ettlement A greement is appropriate a nd j ustified under t he f acts a nd c ircumstances presented by t his matter for the following reasons:
  - i. Duke immediately tested the 23 Oconee Nuclear Station relays for which maintenance records could not be found, and all were found to be within prescribed tolerances.
  - ii. Duke initially discovered that the subject records could not be located, and promptly self-reported their absence up on such discovery, on S eptember 4, 2008.
  - iii. Duke reviewed the relay maintenance records at all three Duke nuclear sites and verified that all relays at the three stations had be en properly included in the maintenance program apart from the 23 Oconee relays which are the subject of this matter. On September 4, 2008, Duke submitted to SERC a mitigation plan and self-report. The mitigation plan was accepted by SERC on March 19, 2009, approved by NERC on March 30, 2009 and completed by Duke on September 21, 2008.
  - iv. No aggravating factors were identified by Duke or SERC.
- 18. Duke agrees to enter i nto this S ettlement A greement with SERC 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. Duke agrees that this Settlement Agreement is in the best interest of the parties and in the best interest of maintaining a reliable electric infrastructure.
- 19. A num ber of r ecent ini tiatives de monstrate D uke's c ommitment to a s trong culture of compliance with the NERC Reliability Standards. First, Duke increased its c ompliance s taff by adding four pe rsonnel c ommitted to its r eliability standards C ompliance A dministration P rogram d uring 2008 a nd 2009. S econd,

Duke's reliability standards Executive Sponsor Committee, a team comprised of senior ma nagement c ommitted to fostering a s trong reliability standards compliance ethic across the enterprise, endorsed creation of a reliability standards Steering Committee in February 2009. The Steering Committee is charged with enhancing the culture of compliance across the company and providing guidance to the Compliance Administration Program. Third, in March 2009 D uke created and f illed a ne w hi gh-ranking position, V ice P resident — Compliance and Integration. This official is responsible for independent operation and oversight of the r eliability standards C ompliance A dministration P rogram. These actions reinforce Duke's ongoing commitment to reliability standards compliance.

# IV. MITIGATING ACTIONS, REMEDIES AND SANCTIONS

- 20. Duke's Mitigation Plan MIT-07-1518 for NERC Reliability Standard PRC-005-1, Requirement 2, w as submitted on September 24, 2008 as c omplete. It w as accepted by SERC on March 19, 2009 and submitted to NERC for its approval on March 20, 2009. NERC approved the Mitigation Plan on March 30, 2009. On September 25, 2008, Duke certified that its Mitigation Plan was completed on September 21, 2008. SERC s taff ve rified on March 30, 2009 t hat Duke had completed its Mitigation Plan. Duke's Mitigation Plan MIT-07-1518 is attached hereto as Appendix A-1. Duke's Certification of Mitigation Plan Completion is attached hereto as Appendix A-2, and the Statement of SERC Compliance Staff Regarding Completion of Duke's Mitigation Plan MIT-07-1518 is attached hereto as Appendix A-3.
- 21. Actions implemented by Duke in its M itigation Plan will help to prevent a recurrence of any similar violation. Specifically:
  - a. Duke tested each of the 23 relays and recorded the results.
  - b. Duke reviewed the records of other switchyard relays at the affected plant to ensure no other Protection System relays were excluded.
  - c. Duke a lso r eviewed the r ecords of other s witchyard r elays at s imilarly situated plants to ensure no other Protection System relays were excluded at those plant s witchyards. No other r elays were found to be missing records of maintenance and testing within their defined intervals.
  - d. Duke included all relays found to be missing records into its preventative maintenance tracking software to ensure future work-orders are developed consistent w ith the m aintenance int ervals in its Protection System Maintenance and Testing program.
- 22. SERC has reviewed the preventative measures described in the Mitigation Plan and has determined that these measures will assist Duke in improving prospective compliance with the requirements of all of the Reliability Standards, including

- NERC R eliability S tandards P RC-005-1 and will ul timately enhance the reliability of the BPS within an appropriate time-frame.
- 23. For its verification of the completion of Duke's Mitigation Plan, SERC reviewed a screenshot showing that all of the relays identified in Duke's mitigation plan were now included in Duke's preventative maintenance program. The screen shot showed the inputs for the preventative maintenance program for all affected relays. SERC also reviewed copies of the work orders showing the maintenance and testing that were performed on each relay covered under this mitigation plan.
- 24. SERC Staff also considered the specific facts and circumstances of the violation and Duke's actions in response to the violation in determining a proposed penalty that meets the requirement in Section 215 of the Federal Power Act that "[a]ny penalty i mposed under this section shall be ar a reasonable relation to the seriousness of the violation and shall take into consideration the efforts of [Duke] to remedy the violation in a timely manner." The factors considered by SERC Staff in the determination of the appropriate penalty for Duke's violation of NERC Reliability Standard PRC-005-1 pursuant to this Settlement A greement included the following:
  - a. Duke has had no pr ior vi olations of this Standard or any closely-related standard during the mandatory reliability period.
  - b. Duke cooperated in both a timely and satisfactory manner with SERC Staff during the investigation.<sup>3</sup> Duke provided prompt responses to all of SERC Staff's da tar equests and c ooperated with SERC Staff during meetings between the parties to discuss these events. Duke proactively initiated its own internal investigation and voluntarily provided supporting information to SERC Staff to assist in SERC Staff's review of the facts and circumstances. This included the submission of a detailed Mitigation Plan and evidence resulting from internal assessments. Duke's comprehensive response to SERC Staff's questions enabled SERC Staff to conduct a thorough investigation in an efficient manner.
  - c. Duke agreed to resolve this issue via settlement and promptly initiated various mitigation and p reventative measures be fore receiving a Notice of A lleged Violation from SERC.
  - d. SERC Staff believes Duke has a well staffed and actively engaged compliance staff. Duke's compliance staff was responsive to SERC Staff's requests and proactive in their activities to determine the complete scope of the violation.

<sup>&</sup>lt;sup>2</sup> 16 U.S.C. § 824o(e)(6).

<sup>&</sup>lt;sup>3</sup> Revised Policy Statement on Enforcement, 123 FERC ¶ 61,156, P 65 (May 15, 2008).

- e. As de scribed above, Duke has implemented a wide-range of measures to address the violation and to protect a gainst future violations of the same or similar requirements, as set forth in Paragraph 21.
- 25. Based on t he above factors, a s w ell a s the mitig ation actions a nd preventative measures taken, Duke agrees to pay \$10,000 to SERC as set forth in this Settlement Agreement for settlement of the violation. Duke shall remit the payment to SERC via che ck, or by w ire transfer to an account to be i dentified by SERC ("SERC Account"), within twenty days after SERC provides Duke with a notice of penalty payment due and invoice, to be issued by SERC after this Settlement Agreement is either approved by the Commission or by operation of law. SERC shall not ify NERC, and NERC shall not ify the Commission, if the payment is not time ly received. If Duke does not remit the payment by the required date, interest payable to SERC will be gin to a ccrue pur suant to the Commission's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date that payment is due, and shall be payable in addition to the payment.
- 26. 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 Settlement Agreement, may subject Duke to new or additional enforcement, penalty or sanction actions in accordance with the NERC R ules of Procedure. Duke will retain all rights to defend against such enforcement actions in a ccordance with the NERC R ules of Procedure.

#### V. ADDITIONAL TERMS

- 27. The s ignatories to the S ettlement A greement a gree th at the y enter int o the Settlement A greement vol untarily a nd that, other than the r ecitations s et f orth herein, no tender, offer or promise of any kind by any member, employee, officer, director, agent or representative of SERC or Duke has been made to induce the signatories or a ny ot her party to enter int o the S ettlement A greement. The signatories a gree that the terms and conditions of this S ettlement A greement are consistent with the C ommission's regulations and or ders, and NERC's Rules of Procedure.
- 28. SERC shall report the terms of all settlements of compliance matters to NERC. NERC will review the settlement for the purpose of evaluating its consistency with other s ettlements entered i nto f or s imilar vi olations or under other, s imilar circumstances. Based on this review, NERC will either approve the settlement or reject the settlement and notify SERC and Duke of changes to the settlement that would result in a pproval. If NERC rejects the settlement, NERC will provide specific written reasons for such rejection and SERC will attempt to negotiate a revised settlement agreement with Duke including any changes to the settlement specified by NERC. If a settlement cannot be reached, the enforcement process shall continue to conclusion. If NERC a pproves the settlement, NERC will (i) report the approved settlement to the Commission for the Commission's review and

- approval by order or o peration of law and (ii) publicly post this S ettlement Agreement.
- 29. This S ettlement A greement s hall be come e ffective upon the C ommission's approval of the Settlement Agreement by order or operation of law as submitted to it or as modified in a manner acceptable to the parties.
- 30. Duke agrees that this S ettlement A greement, when a pproved by N ERC and the Commission, shall represent a final settlement of all matters set forth herein and Duke waives its right to further hearings and appeal, unless and only to the extent that Duke contends that any N ERC or C ommission action on the S ettlement Agreement c ontains on e or mor em aterial modifications to the S ettlement Agreement. SERC reserves all rights to initiate enforcement, penalty or sanction actions against Duke in accordance with the NERC Rules of Procedure in the event that Duke fails to comply with the mitigation plan agreed to in this S ettlement Agreement. In the event Duke fails to comply with any of the stipulations, remedies, sanctions or additional terms, as set forth in this S ettlement Agreement, SERC will initiate enforcement, penalty, or sanction actions against Duke to the maximum extent allowed by the NERC Rules of Procedure, up to the maximum statutorily allowed penalty. Except a sot herwise s pecified in this S ettlement Agreement, Duke shall retain all rights to defend against such enforcement actions, also according to the NERC Rules of Procedure.
- 31. 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 Settlement Agreement on the entity's behalf.
- 32. The undersigned representative of each party affirms that he or she has read the Settlement Agreement, that all of the matters set forth in the Settlement Agreement are true and correct to the best of his or her knowledge, information and belief, and that he or she understands that the Settlement Agreement is entered into by such party in express reliance on those representations, provided, ho wever, that such affirmation by each party's representative shall not a pply to the other party's statements of position set forth in Section III of this Settlement Agreement.
- 33. The Settlement Agreement may be signed in counterparts.
- 34. This S ettlement A greement is ex ecuted in duplicate, each of which so executed shall be deemed to be an original.

Remainder of page intentionally blank. Signatures to be affixed to the following page.

Agreed to and accepted:

Thomas J. Galloway

Vice President and Director of Compliance

SERC RELIABILITY CORPORATION

9/17/09 Date

Mark McCulla

9 - 11 - 09 Date

Vice President, Transmission Regulatory Compliance

ENTERGY SERVICES, INC.,

on behalf of the Entergy Operating Companies

# APPENDIX A TO SETTLEMENT AGREEMENT OF SERC RELIABILITY CORPORATION AND DUKE ENERGY CAROLINAS, LLC

- (1) Duke's Mitigation Plan for PRC-005-1, R2
- (2) Duke's Certification of Mitigation Plan Completion for PRC-005-1, R2
- (3) Statement of SERC Reliability Corporation Compliance Staff Regarding Completion of Duke's Mitigation Plan for PRC-005-1, R2



# Mitigation Plan Submittal Form

Date this Mitigation Plan is being submitted: 09/04/2008

If this Mitigation Plan has already been completed:

- Check this box 

  and
- · Provide the Date of Completion of the Mitigation Plan:

# Section A: Compliance Notices

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

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



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

# Section B: Registered Entity Information

B.1 Identify your organization:

Company Name: Duke Energy Carolinas, LLC

Company Address: 526 South Church St, Charlotte, NC 28202

NERC Compliance Registry ID [if known]: NCR01219

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

Name:

Michael Kuhl

Title:

Compliance Program Manager

Email:

michael.kuhl@duke-energy.com

Phone:

513.287.3630



# Section C: <u>Identity of Reliability Standard Violations</u> Associated with this Mitigation Plan

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

- C.1 Standard: PRC-005-1 [Identify by Standard Acronym (e.g. FAC-001-1)]
- C.2 Requirement(s) violated and violation dates: [Enter information in the following Table]

NERC Violation ID # [if known]	SERC Violation ID # [if known ]	Requirement Violated (e.g. R3.2)	Violation Date <sup>(*)</sup>
N/A	N/A	R2	09/04/2008

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

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

In 1989 the responsibility for maintaining Switchyards at Duke Nuclear Stations was turned over to the Nuclear Generation Department (NGD) from Power Delivery (PD).

The following relay preventive maintenance (PM) records could not be found in either PD or NGD files:

- 6 525kV breaker failure relays
- 6 525/230kV Autobank differential relays
- 1 525/230kV Autobank neutral overcurrent relay
- 3 230/4.16kV Transformer phase overcurrent relays
- 2 230/4.16kV Transformer neutral overcurrent relays
- 3 230/4.16kV Transformer differential relays
- 1 230kV breaker failure overcurrent relay
- 1 230kV breaker failure timer relay
- C.4 [Optional] Provide any relevant additional information regarding the violations associated with this Mitigation Plan:

# Section D: <u>Details of Proposed Mitigation Plan</u>

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# Mitigation Plan Contents

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

Task nos. 1 through 7 of the mitigation plan have been completed. Task no. 8 will be completed by 9/30/2008.

1. ONS Breakers Failure Relays were tested and found to be within acceptable limits. Time Line:

Concern Identified: 7/30/08
Issue confirmed: 8/1/08
Testing completed: 8/3/08

2. The relays associated with the Autobank were tested and found to be within acceptable limits.

# Time Line:

Concern Identified: 7/30/08
Issue confirmed: 8/12/08
Testing completed: 8/14/08

4. The relays associated with Auxiliary Transformer 4T were tested and found to be within acceptable limits.

# Time Line:

Concern Identified: N/A
 Issue confirmed: 8/13/08

Initial Mitigation measure: 4T taken out-of-service on 8/14/08

Testing completed: 8/19/08

The relays associated with PCB-4 were tested and found to be within acceptable limits.

#### Time Line:

Concern Identified: N/A
 Issue confirmed: 8/13/08

Initial Mitigation measure: PCB-4 taken out-of-service on 8/14/08

Testing completed: 8/19/08

# Appendix A-1



- Review of all remaining relays related to the Oconee Switchyards was conducted to
  ensure no other relay maintenance/testing requirements were excluded during the
  1989 transition. No additional relays were identified.
- 7. Reviews were also conducted for the McGuire and Catawba Nuclear Stations, to ensure all relays were included in the PM Program. McGuire and Catawba Nuclear Stations confirmed all switchyard relays are in the PM Program. These reviews were completed on 8/11/08 for CNS and 8/12/08 for MNS.
- 8. Action Tracking Requests (AR's) will be completed by 09/30/2008. AR's are the mechanism for the calibration/testing requirements inclusion in the PM program for NGD.

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

# Mitigation Plan Timeline and Milestones

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

There is only one activity to complete; Initiate and complete the Action Tracking Requests to include the appropriate calibration and testing requirements into the PM program. See Section D.3 for timetable.

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

Milestone Activity	Proposed Completion Date* (shall not be more than 3 months apart)		
AR Completion	09/30/2008		

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

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

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# Additional Relevant Information (Optional)

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

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

# Section E: Interim and Future Reliability Risk

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

# Abatement of Interim BPS Reliability Risk

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

The only remaining activity to complete the mitigation plan is the development of the PM model workorders for the 23 relays noted above. All relays are currently within the calibration interval (3 years) and all PM model workorders will be completed significantly ahead of the next calibration due date.

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

# Prevention of Future BPS Reliability Risk

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

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Since the 1989 transition of maintenance responsibility involved only the nuclear station switchyards, the scope of relays affected are only those associated with the nuclear switchyards. All relays for all three nuclear sites have been reviewed and verified to be included in the maintenance program.

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

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

Continued on Next Page



# 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:

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

Authorized Individual Signature

(Electronic signatures are acceptable; see CMEP)

Name (Print): James W Bowden

Title: GM Substation Operations and Maintenance

Date: September 4, 2008

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CONFIDENTIAL INFORMATION



# Section G: Comments and Additional Information

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

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

# Submittal Instructions:

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

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

Email the pdf file to serccomply@serc1.org.

Please direct any questions regarding completion of this form to:

Ken Keels Manager, Compliance Enforcement SERC Reliability Corporation 704-357-7372 kkeels@serc1.org





526 South Church Street Charlotte, North Carolina

Mailing Address: 139 East Fourth Street Room 651- Annex Cincinnati, Ohio 45202

513 287 3630

513 287 3812 fax

September 25, 2008

Confidential

Michael.kuhl@duke-energy.com

Mark Ladrow SERC Reliability Corporation 2815 Coliseum Centre Drive, Suite 500 Charlotte, NC 28217

Via Email

Subject: Certification of a Completed Mitigation Plan (SERC #08-101)

Dear Mark:

In this letter, Duke Energy Carolinas, LLC (NCR01219) certifies that all required actions described in the Mitigation Plan involving a self-report, SERC tracking no. 08-101, to SERC for a potential standard violation of PRC-005-1 have been completed.

Name of Registered Entity submitting certification: Duke Energy Carolinas, LLC

Date of Certification: September 25, 2008

Name of Standard and the Requirement(s) of mitigated violation(s): PRC-005 R2

SERC Tracking Number (contact SERC if not known): 08-101

NERC Violation ID Number (if assigned): N/A

Date of completion of the Mitigation Plan: September 21, 2008

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

Name: James W Bowden

Title: GM Substation Operations and Maintenance

Entity: Duke Energy Carolinas, LLC Email: jbowden@duke-energy.com

Phone: 704.382.9195

Executive Signature

James W. Bowler Date September 25, 2008

# Appendix A-2

Submission of information to verify that required actions in the Mitigation Plan have been completed is being provided to SERC in concurrence with this submission. A screenshot illustrating all affected equipment is included in Duke's PM program and is attached as Exhibit 1.

As always, please do not hesitate to contact the undersigned should you have questions or concerns.

Respectfully submitted,

Michael A. Kuhl

Compliance Program Manager



# Exhibit 1 is not included as part of this filing

# Appendix A-3

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

Registered Entity: Duke Energy Carolinas

SERC Tracking ID: 08-101

NERC Violation No: SERC200800185 NERC Mitigation Plan ID: MIT-07-1518 Standard: PRC-005-1

Requirement(s): R2

## **Violation Summary:**

Entity discovered records of maintenance were missing for 23 relays (525/230 kV) located in a specific switchyard at the line of demarcation between a nuclear plant and the Transmission Owner bulk electric system. Entity was unable to provide evidence the Protection System devices were maintained within the defined interval or the date the devices were last maintained. Entity is in violation of PRC-005-1, R2 because it was unable to provide evidence Protection System devices were maintained within the defined interval or the date the devices were last maintained.

# **Mitigation Plan Summary:**

Duke Energy Carolinas' Mitigation Plan to address the referenced violation was submitted on September 4, 2008 and was accepted by SERC on March 19, 2009 and approved by NERC on March 30, 2009. The Mitigation Plan is identified as MIT-07-1518 and was submitted as non-public information to FERC on April 1, 2009 in accordance with FERC orders.

Duke Energy Carolinas immediately took action to test all relays and associated equipment where records could not be located. The specific relays were added to the maintenance records program for future maintenance consistent with the maintenance intervals. Duke Energy Carolina's also reviewed the maintenance records of similarly situated nuclear plants to ensure a similar situation did not exist. No further gaps in maintenance records were found.

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

SERC Reliability Corporation Compliance Staff ("SERC Staff") monitors the Registered Entity's progress towards completion of its Mitigation Plans in accordance with Section 6.0 of the uniform Compliance Monitoring and Enforcement Program, ("CMEP"). Pursuant to the CMEP, Registered Entities are required to establish implementation milestones no more than three (3) months apart. SERC Staff solicits quarterly reports from all Registered Entities with open mitigation plans to monitor the progress on completion of milestones. SERC Staff also produces and reviews daily Mitigation Plan



status reports highlighting Mitigation Plans that are nearing the scheduled completion date. If the Registered Entity fails to complete its Mitigation Plan according to schedule, appropriate additional enforcement action is initiated to assure compliance is attained.

# **Mitigation Plan Completion Review Process:**

Duke Energy Carolinas certified on September 25, 2008 that the subject Mitigation Plan was completed on September 21, 2008. A SERC compliance staff member reviewed the evidence submitted in a manner similar to a compliance audit. That action was followed by another compliance staff member's peer review of the initial conclusion.

#### **Evidence Reviewed:**

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

- 08-101 DEC (PRC-005) MP Evidence 09252008.pdf A screenshot illustrating all affected equipment is included in Duke's preventative maintenance program. This screenshot shows the inputs for preventative maintenance program for all relevant breaker failure relays, autobank protective relays, and 4T protective relays.
- 08-101 DEC (PRC-005) MP Evidence 032509.pdf Copies of work orders with the technician comments showing the maintenance and testing performed on each relevant relay.

#### Conclusion:

On March 30, 2009 SERC Reliability Corporation Compliance Staff ("SERC Staff") completed its review of the evidence submitted by Duke Energy Carolinas in support of its Certification of Completion of the subject Mitigation Plan. Based on its review of the evidence submitted, SERC Staff verifies that, in its professional judgment, all required actions in the Mitigation Plan have been completed and Duke Energy Carolinas is in compliance with the subject Reliability Standard Requirements.

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

Respectfully Submitted, Mark Ladrow Sam Stryker



# **Attachment c**

# **Notice of Filing**

# UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Duke Energy Carolinas, LLC Docket

No. NP10- -000

# NOTICE OF FILING February 12, 2010

Take notice that on February 12, 2010, the North American Electric Reliability Corporation (NERC) filed a Notice of Penalty regarding Duke Energy Carolinas, LLC in the SERC Reliability Corporation region.

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

The Commission encourages electronic submission of protests and interventions in lieu of paper using the "eFiling" link at <a href="http://www.ferc.gov">http://www.ferc.gov</a>. 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 <a href="http://www.ferc.gov">http://www.ferc.gov</a>, 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 <a href="ferconlineSupport@ferc.gov">FERCOnlineSupport@ferc.gov</a>, or call (866) 208-3676 (toll free). For TTY, call (202) 502-8659.

Comment Date: [BLANK]

Kimberly D. Bose, Secretary