

July 31, 2018

VIA ELECTRONIC FILING

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

Re: NERC Full Notice of Penalty regarding Georgia Power Company, FERC Docket No. NP18-_-000

Dear Ms. Bose:

The North American Electric Reliability Corporation (NERC) hereby provides this Notice of Penalty¹ regarding Georgia Power Company (GPC), NERC Registry ID# NCR01247,² with information and details regarding the nature and resolution of the violation³ discussed in detail in the Settlement Agreement attached hereto (Attachment A), in accordance with the Federal Energy Regulatory Commission's (Commission or FERC) rules, regulations, and orders, as well as NERC's Rules of Procedure including Appendix 4C (NERC Compliance Monitoring and Enforcement Program (CMEP)).⁴

NERC is filing this Notice of Penalty with the Commission because SERC Reliability Corporation (SERC) and GPC have entered into a Settlement Agreement to resolve all outstanding issues arising from SERC's determination and findings of a violation of FAC-009-1 R1.

3353 Peachtree Road NE Suite 600, North Tower Atlanta, GA 30326 404-446-2560 | www.nerc.com

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 (2017). 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 GPC was included on the NERC Compliance Registry as a Distribution Provider, Generator Owner, and Transmission Owner (TO) on May 31, 2007.

³ For purposes of this document, each violation at issue is described as a "violation," regardless of its procedural posture and whether it was a possible, alleged, or confirmed violation.

⁴ See 18 C.F.R § 39.7(c)(2) and 18 C.F.R § 39.7(d).



According to the Settlement Agreement, GPC admits to the violation and agreed to the assessed penalty of two hundred thousand dollars (\$200,000), 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.

Statement of Findings Underlying the Violation

This Notice of Penalty incorporates the findings and justifications set forth in the Settlement Agreement, by and between SERC and GPC. 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 (2018), NERC provides the following summary table identifying each violation of a Reliability Standard resolved by the Settlement Agreement. Further information on the subject violation is set forth in the Settlement Agreement and herein.

 Violation(s) Determined and Discovery Method *SR = Self-Report / SC = Self-Certification / CA = Compliance Audit / SPC = Spot Check / CI = Compliance Investigation 								
NERC Violation ID	Standard	Req.	VRF/VSL	Applicable Function(s)	Discovery Method*	Violation Start-End Date	Risk	Penalty Amount
SERC2015015062	FAC-009-1	R1	Medium/ High	то	SR 7/2/2015	6/18/2007 – 10/12/2016	Moderate	\$200,000

SERC2015015062 FAC-009-1 R1 - OVERVIEW

While gathering evidence in response to a SERC data request for a July 2015 Compliance Audit, GPC discovered that the Facility Rating it used for a 230/115 kV autobank transformer was not consistent with its Facility Ratings Methodology (FRM). GPC incorrectly identified the transformer bank nameplate rating of 300 MVA as the most limiting element (MLE) in the energy management system (EMS) and established an incorrect Facility Rating of 300 MVA based on that error. GPC should have established a Facility Rating for the line based on the actual MLEs, which were the connections to the main low-side bus and the main low-side bus conductors for each phase rated at 285 MVA. GPC submitted a Self-Report stating that it did not have a Facility Rating for the autobank transformer that was consistent with the associated FRM.



In response to a request for information from SERC, GPC assessed the Facility Ratings for all of its 719 transmission line facilities and 141 autobank transformer circuits. GPC discovered that it had Facility Ratings that were inconsistent with its FRM for 91 of the 719 (12.66 percent) transmission line Facilities. Of the 91 discrepancies, GPC found 74 were errors in the EMS, 16 were control center documentation errors, and one was an incorrectly applied derate. GPC also found that it had Facility Ratings that were inconsistent with its FRM for 32 of the 141 (22.7 percent) autobank transformer facilities. GPC found discrepancies with low-side jumpers or low-side switch/breaker elements, which GPC had not considered as limiting elements.

The majority of the errors occurred primarily due to GPC's EMS database having incomplete element types available at the time GPC set up the Facilities in the EMS. When an exact match was not available in the drop-down menu in the EMS, GPC personnel used professional judgment to determine which element to select as the MLE. Additionally, the control center documentation errors occurred when documentation did not contain all the elements, misidentified one or more elements, or mischaracterized one or more elements.

SERC determined that this violation posed a moderate risk to the reliability of the bulk power system (BPS). GPC's planning and operating simulation-based studies depend on accurate ratings to plan construction and to establish operating criteria such that the BPS can withstand a variety of predetermined contingencies. GPC used inaccurate Facility Ratings in its planning and operating studies, which compromised the validity of the studies.

GPC reviewed actual maximum line loadings over 2015 and determined that none of the 43 derated transmission line facilities experienced loadings in excess of the rating of the correct MLE. The majority of these facilities did not exceed 75 percent of the corrected MLE rating. During 2015, none of the derated 32 autobank transformer facilities experienced loadings in excess of the rating of the correct MLE. The majority of the autobank transformer facilities with identified discrepancies did not exceed 75 percent of the corrected MLE rating. Only 11 of the derates exceeded a threshold of a 10 percent difference from the correct MLE. GPC typically sets first-level alarms in the EMS at 90 percent of the Facility Rating. Therefore, operators would have been alerted for loadings before exceeding the Facility Rating for 85.33 percent of the derated Facilities.



GPC submitted its Mitigation Plan on January 3, 2017, to address the referenced violation.

To mitigate and prevent recurrence of this violation, GPC:

- 1. Corrected the discrepancies in transmission line and autobank transformer Facility Ratings;
- 2. Used Southern Company's Internal Compliance Program (ICP) to reasonably assure the Facility Rating discrepancies were not affecting other operating companies;
- 3. Developed a documented change management process for transmission Facility Ratings;
- 4. Developed a searchable Facility Rating element repository for operations personnel responsible for applying the MLE ratings in the EMS; and
- Trained appropriate personnel in the change management process for transmission Facility Ratings.

GPC certified that it had completed all mitigation activities. SERC verified that GPC completed all mitigation activities as of April 27, 2017. Attachment B provides specific information on SERC's verification of GPC's completion of the activities.

Regional Entity's Basis for Penalty

According to the Settlement Agreement, SERC assessed a penalty of two hundred thousand dollars (\$200,000) for the referenced violation. In reaching this determination, SERC considered the following factors:

- 1. SERC considered the instant violation as repeat noncompliance with the subject NERC Reliability Standard. For the reasons stated in the Settlement Agreement, SERC determined the compliance history should not serve as an aggravating factor;⁵
- 2. GPC had an ICP at the time of the violation, for which SERC did not provide mitigating credit because the controls in place did not detect the inconsistent Facility Ratings;
- 3. GPC did not receive mitigating credit for self-reporting because the Self-Report was submitted after receiving notice of an upcoming Compliance Audit;

⁵ GPC's relevant prior noncompliance with FAC-009-1 R1 includes NERC Violation ID SERC2016015499.



- 4. GPC was cooperative throughout the compliance enforcement process;
- 5. GPC admitted to the violation;
- 6. there was no evidence of any attempt to conceal a violation nor evidence of intent to do so;
- 7. the violation posed a moderate and not a serious or substantial risk to the reliability of the BPS; and
- 8. there were no other mitigating or aggravating factors or extenuating circumstances that would affect the assessed penalty.

After consideration of the above factors, SERC determined that, in this instance, the penalty amount of two hundred thousand dollars (\$200,000) is appropriate and bears a reasonable relation to the seriousness and duration of the violation.

Statement Describing the Assessed Penalty, Sanction or Enforcement Action Imposed⁶

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, October 26, 2009 and August 27, 2010 Guidance Orders, the NERC BOTCC reviewed the violation on July 12, 2018 and approved the resolution between SERC and GPC. In approving the resolution, the NERC BOTCC reviewed the applicable requirements of the Commission-approved Reliability Standards and the underlying facts and circumstances of the violation at issue.

For the foregoing reasons, the NERC BOTCC believes that the assessed penalty of two hundred thousand dollars (\$200,000) is appropriate for the violation and circumstances at issue, and is consistent with NERC's goal to promote and ensure reliability of the BPS.

Pursuant to 18 C.F.R. § 39.7(e), 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.

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⁶ See 18 C.F.R. § 39.7(d)(4).

⁷ North American Electric Reliability Corporation, "Guidance Order on Reliability Notices of Penalty," 124 FERC ¶ 61,015 (2008); North American Electric Reliability Corporation, "Further Guidance Order on Reliability Notices of Penalty," 129 FERC ¶ 61,069 (2009); North American Electric Reliability Corporation, "Notice of No Further Review and Guidance Order," 132 FERC ¶ 61,182 (2010).



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:

- 1. Settlement Agreement by and between SERC and GPC executed April 3, 2018, included as Attachment A;
- 2. Disposition of Violation, included as Attachment B;
- 3. GPC's Self-Report for FAC-009-1 R1 dated July 2, 2015, included as Attachment C;
- 4. GPC's Mitigation Plan designated as SERCMIT012583 for FAC-009-1 R1 submitted January 3, 2017, included as Attachment D; and
- 5. GPC's Certification of Mitigation Plan Completion for FAC-009-1 R1 submitted May 1, 2017, included as Attachment E.



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

Holly A. Hawkins*

General Counsel

SERC Reliability Corporation

3701 Arco Corporate Drive, Suite 300

Charlotte, NC 28273

(704) 494-7775

(704) 357-7914 - facsimile

hhawkins@serc1.org

Rebecca A. Poulsen*

Legal Counsel

SERC Reliability Corporation

3701 Arco Corporate Drive, Suite 300

Charlotte, NC 28273

(704) 414-5230

(704) 357-7914 - facsimile

rpoulsen@serc1.org

Gary Taylor*

President and Chief Executive Officer

SERC Reliability Corporation

3701 Arco Corporate Drive, Suite 300

Charlotte, NC 28273

(704) 940-8205

(704) 357-7914 – facsimile

gtaylor@serc1.org

Sonia C. Mendonça*

Vice President, Deputy General Counsel, and

Director of Enforcement

North American Electric Reliability

Corporation

1325 G Street N.W.

Suite 600

Washington, DC 20005

(202) 400-3000

(202) 644-8099 – facsimile

sonia.mendonca@nerc.net

Edwin G. Kichline*

Senior Counsel and Director of

Enforcement Oversight

North American Electric Reliability

Corporation

1325 G Street N.W.

Suite 600

Washington, DC 20005

(202) 400-3000

(202) 644-8099 - facsimile

edwin.kichline@nerc.net

Alexander Kaplen*

Associate Counsel

North American Electric Reliability

Corporation

1325 G Street N.W.

Suite 600

Washington, DC 20005

(202) 400-3000

(202) 644-8099 – facsimile

alexander.kaplen@nerc.net



Meredith M. Lackey*
SVP Gen Couns, Corp Sec & CCO
Georgia Power Company
241 Ralph McGill Blvd
Atlanta, Georgia 30308
(404) 506-2702
(404) 506-3983 – facsimile
mmlackey@southernco.com

Timothy D. Self*
Compliance Director
Southern Company Services
600 North 18th Street
Birmingham, Alabama 35203
(205) 257-6065
(205) 257-5795 – facsimile
tdself@southernco.com

*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.

Respectfully submitted,

/s/ Alexander Kaplen

Sonia C. Mendonça Vice President, Deputy General Counsel, and Director of Enforcement Edwin G. Kichline Senior Counsel and Director of **Enforcement Oversight** Alexander Kaplen **Associate Counsel** North American Electric Reliability Corporation 1325 G Street N.W. Suite 600 Washington, DC 20005 (202) 400-3000 (202) 644-8099 - facsimile sonia.mendonca@nerc.net edwin.kichline@nerc.net alexander.kaplen@nerc.net

cc: Georgia Power Company
SERC Reliability Corporation

Attachments



Attachment A

Settlement Agreement by and between SERC and GPC Executed April 3, 2018

SETTLEMENT AGREEMENT

OF

SERC RELIABILITY CORPORATION

AND

GEORGIA POWER COMPANY

I. INTRODUCTION

1. SERC Reliability Corporation (SERC) and Georgia Power Company (GPC) enter into this Settlement Agreement (Settlement Agreement) to resolve all outstanding issues arising from a preliminary and non-public assessment resulting in SERC's determination and findings, pursuant to the North American Electric Reliability Corporation (NERC) Rules of Procedure, of one confirmed violation.

Reliability Standard	Requirement	SERC Tracking No.	NERC Tracking No.
FAC-009-1	R1	SERC2015-402230	SERC2015015062

2. GPC **admits** the one violation and has agreed to the proposed penalty of **\$200,000** in addition to other remedies and actions to mitigate the instant violation and to ensure future compliance under the terms and conditions of the Settlement Agreement.

II. STIPULATION

3. The facts stipulated herein are stipulated solely for the purpose of resolving, between GPC and SERC, the matters discussed herein and do not constitute stipulations or admissions for any other purpose. GPC and SERC hereby stipulate and agree to the following:

Background

4. See Section I of the Disposition document (Attachment A) for a description of GPC.

Violation of NERC Reliability Standards

5. See Section II of the Disposition document (Attachment A) for the description of the violation.

III. PARTIES' SEPARATE REPRESENTATIONS

Statement of SERC and Summary of Findings

- 6. SERC determined that GPC was in violation of FAC-009-1 R1 because GPC did not establish Facility Ratings consistent with its Facility Rating Methodology (FRM) for 12.66% of its transmission line Facilities and 22.7% of its autotransformer Facilities. There was one violation included in the Disposition document, Attachment A.
- 7. SERC agrees that this Settlement Agreement is in the best interest of the parties and in the best interest of bulk power system reliability.

Statement of GPC

- 8. GPC **admits** the facts set forth and agreed to by the parties for purposes of this Settlement Agreement constitute a violation of the Standard and Requirement listed in the table above.
- 9. GPC has agreed to enter into this Settlement Agreement 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. GPC agrees that this Settlement Agreement is in the best interest of the parties and in the best interest of BPS reliability.

IV. MITIGATING ACTIONS, REMEDIES AND SANCTIONS

- 10. SERC and GPC agree that GPC has completed the mitigating actions and SERC has verified the completion of the mitigating actions set forth in Section IV of the Disposition document (Attachments A). The Mitigating Actions, Remedies and Sanctions are discussed in detail in the Disposition document (Attachment A).
- 11. SERC staff also considered the specific facts and circumstances of the violation and GPC'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 imposed under this section shall bear a reasonable relation to the seriousness of the violation and shall take into consideration the efforts of an entity to remedy the violation in a timely manner." The factors considered by SERC staff in the determination of the appropriate penalty are set forth in Section V of the Disposition document.
- 12. Based on the above factors, as well as the mitigation actions and preventative measures taken, GPC shall pay \$200,000 to SERC as set forth in this Settlement

¹ 16 U.S.C. § 824o(e)(6).

Agreement. GPC shall remit the payment to SERC via check, or by wire transfer to an account to be identified by SERC within thirty days after the Agreement is either approved by the Federal Energy Regulatory Commission (Commission) or by operation of law. SERC shall notify NERC, and NERC shall notify the Commission, if the payment is not timely received. If GPC does not remit the payment by the required date, interest payable to SERC will begin to accrue pursuant 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.

13. 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 shall be deemed to be either the same alleged violations that initiated this Settlement Agreement and/or additional violations and may subject GPC to new or additional enforcement, penalty or sanction actions in accordance with the NERC Rules of Procedure. GPC shall retain all rights to defend against such additional enforcement actions in accordance with NERC Rules of Procedure.

V. ADDITIONAL TERMS

- 14. The signatories to the Settlement Agreement agree that they enter into the Settlement 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 SERC or GPC has been made to induce the signatories or any other party to enter into the Settlement Agreement. The signatories agree that the terms and conditions of this Settlement Agreement are consistent with the Commission's regulations and orders, and NERC's Rules of Procedure.
- 15. 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 settlements entered into for similar violations or under other, similar circumstances. Based on this review, NERC will either approve the settlement or reject the settlement and notify SERC and GPC of changes to the settlement that would result in approval. 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 GPC including any changes to the settlement specified by NERC. If a settlement cannot be reached, the enforcement process shall continue to conclusion. If NERC approves the settlement, NERC will (i) report the approved settlement to the Commission for the Commission's review and approval by order or operation of law and (ii) publicly post this Settlement Agreement.
- 16. This Settlement Agreement shall become effective upon the Commission'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.
- 17. GPC agrees that this Settlement Agreement, when approved by NERC and the Commission, shall represent a final settlement of all matters set forth herein and GPC

waives its right to further hearings and appeal, unless and only to the extent that GPC contends that any NERC or Commission action on the Settlement Agreement contains one or more material modifications to the Settlement Agreement. SERC reserves all rights to initiate enforcement, penalty or sanction actions against GPC in accordance with the NERC Rules of Procedure in the event that GPC does not comply with the Mitigation Plans and compliance program agreed to in this Settlement Agreement. In the event GPC fails to comply with any of the stipulations, remedies, sanctions or additional terms, as set forth in this Settlement Agreement, SERC will initiate enforcement, penalty, or sanction actions against GPC to the maximum extent allowed by the NERC Rules of Procedure, up to the maximum statutorily allowed penalty. Except as otherwise specified in this Settlement Agreement, GPC shall retain all rights to defend against such enforcement actions, also according to the NERC Rules of Procedure.

- 18. GPC consents to the use of SERC's determinations, findings, and conclusions set forth in this Settlement Agreement for the purpose of assessing the factors, including the factor of determining the company's history of violations, in accordance with the NERC Sanction Guidelines and applicable Commission orders and policy statements. Such use may be in any enforcement action or compliance proceeding undertaken by NERC and/or any Regional Entity; provided, however, that GPC does not consent to the use of the specific acts set forth in this Settlement Agreement as the sole basis for any other action or proceeding brought by NERC and/or SERC, nor does GPC consent to the use of this Settlement Agreement by any other party in any other action or proceeding.
- 19. 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.
- 20. 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, 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 Settlement Agreement.
- 21. The Settlement Agreement may be signed in counterparts.
- 22. This Settlement Agreement is executed 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:

Gary J. Taylor

President and Chief Executive Officer

SERC RELIABILITY CORPORATION

4-3-2018

9-2-2018 Date

Date

Meredian Lackey

Sr. Vice President, General Counsel,

Corporate Secretary, and Chief Compliance Officer

GEORGIA POWER COMPANY



Attachment B

Disposition of Violation

$\frac{DISPOSITION\ OF\ VIOLATION^{\underline{1}}}{April\ 3,\ 2018}$

NERC TRACKING NO. SERC2015015062			SERC TRACKING NO. SERC2015-402230			NOC#					
REGISTERED ENTITY Georgia Power Company							NERC REGISTRY ID NCR01247				
REGIONAL ENTITY SERC Reliability Corporation (SERC)											
			I.	REG	<u>ISTRA</u>	TION	INFORM	IATIO	<u>N</u>		
ENTI	ΓY IS R	EGIST	ERED FO	R THE	FOLLO	OWING	FUNCT	IONS II	N THE SI	ERC RI	EGION
		(BO	TTOM R	OW IN	DICAT	ES RE	GISTRAT	ION D	ATE):		
BA	DP	GO	GOP	PA	RC	RP	RSG	TO	TOP	TP	TSP
	X	X						X			
	5/31/07	5/31/07						5/31/07			
* VIOLATION(S) APPLIES TO SHADED FUNCTIONS DESCRIPTION OF THE REGISTERED ENTITY GPC is an investor-owned, retail electric service company whose common stock is owned by Atlanta-based Southern Company. GPC has a total generation capacity of 21,823 MW. GPC has a total of 9,462 miles of transmission line ranging from 115 kV to 500 kV and 44 interconnections with various entities on the Bulk Electric System (BES).											
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WITH I	RESPE	CT TO	THE VIOI	LATIO	N(S), R	EGIST	ERED EN	TITY			
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WITH I	WITH RESPECT TO THE ASSESSED PENALTY OR SANCTION, REGISTERED ENTITY										

YES

 \boxtimes

ACCEPTS IT/ DOES NOT CONTEST IT

¹ For purposes of this document and attachments hereto, each violation at issue is described as a "violation" regardless of its procedural posture and whether it was a possible, alleged or confirmed violation.

II. VIOLATION INFORMATION

RELIABILITY	REQUIREMENT(S)	SUB-	VRF(S)	VSL(S)
STANDARD		REQUIREMENT(S)		
FAC-009-1 ²	R1		Medium	High ³

PURPOSE OF THE RELIABILITY STANDARD AND TEXT OF RELIABILITY STANDARD AND REQUIREMENT(S)/SUB-REQUIREMENT(S)

The purpose statement of FAC-009-1 provides:

To ensure that Facility Ratings used in the reliable planning and operation of the Bulk Electric System (BES) are determined based on an established methodology or methodologies.

FAC-009-1 R1 provides, in pertinent part:

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

VIOLATION DESCRIPTION

On April 21, 2015, SERC sent Georgia Power Company (GPC) an audit detail letter notifying it of a Compliance Audit scheduled for July 20, 2015 through August 7, 2015.

On July 2, 2015, GPC submitted a Self-Report stating that, as a Transmission Owner, it was in violation of FAC-008-3 R6. GPC did not have a Facility Rating for a 230/115 kV autobank transformer that was consistent with the associated Facility Ratings Methodology (FRM). SERC later determined that the violation extended back to FAC-009-1 R1.

On June 27, 2015, while gathering evidence in response to a SERC data request for the July 2015 Compliance Audit, GPC discovered that the Facility Rating it used for the Clermont Junction 230/115 kV autobank transformer was not consistent with its FRM. GPC had incorrectly identified the transformer bank nameplate rating of 300 MVA as the most limiting element (MLE) in the energy management system (EMS) and established an incorrect Facility Rating of 300 MVA based on that error. GPC should have established a Facility Rating for the line based on actual MLE, which were the connections to the main low-side bus and the main low-side bus conductors for each phase, rated at 285 MVA.

² GPC's violation spans the effective dates of two Standards. FAC-009-1 was in effect from June 18, 2007 to December 31, 2012. The requirements of FAC-009 were included in FAC-008-3 which became effective on January 1, 2013. In that Standard, R6 requires each "Transmission Owner and Generator Owner shall have Facility Ratings for its solely and jointly owned Facilities that are consistent with the associated Facility Ratings methodology or documentation for determining its Facility Ratings."

³ SERC assessed a Violation Severity Level (VSL) of "High" in accordance with the July 6, 2016 VSL Matrix because GPC failed to establish Facility Ratings consistent with the associated Facility Ratings methodology or documentation for determining the Facility Ratings for more than 10% up to (and including) 15% of its solely owned and jointly owned Facilities.

In response to a request for information from SERC, GPC conducted a broader assessment by assessing Facility Ratings for all of its 719 transmission line facilities and 141 autobank transformer circuits.

GPC discovered that it had Facility Ratings that were inconsistent with its FRM for 91 of the 719 (12.66%) transmission line Facilities. GPC de-rated 43 of the transmission line Facilities, with the derates ranging from 0.6% to 50.1% of the prior incorrect ratings and the highest derate being 454 MVA. GPC re-rated the remaining 48 Facilities higher, with the rerates ranging from 0.1% to 58.2% of the prior incorrect ratings. Of the 91 discrepancies, GPC found 74 were errors in the EMS database, 16 were control center documentation errors, and one was an incorrectly applied derate.

GPC also found that it had Facility Ratings that were inconsistent with its FRM for 32 of the 141 (22.7%) autobank transformer Facilities. GPC de-rated all 32 of the autobank transformer Facilities, with the derates ranging from 0.4% to 40.3% of the prior incorrect ratings and the highest derate being 161 MVA. GPC found discrepancies with low-side jumpers or low-side switch/breaker elements, which GPC did not consider as limiting elements.

GPC determined that the EMS errors were due primarily to the EMS database having incomplete element types available at the time GPC set up the Facilities in the EMS. When an exact match was not available in the drop-down menu in the EMS, GPC personnel used judgment to determine which element to select as the MLE. GPC determined that the control center documentation errors occurred when documentation did not contain all the elements, misidentified one or more elements, or mischaracterized one or more elements. Most of the 16 control center data errors occurred because GPC used a 100 degree Celsius rating for the conductors associated with substation buses, rather than the 90 degree Celsius rating specified in the FRM. GPC determined that the lack of a searchable Facility Rating element database that was available to control center personnel may have contributed to errors when developing the documentation.

RELIABILITY IMPACT STATEMENT- POTENTIAL AND ACTUAL

This violation posed a moderate risk and did not pose a serious or substantial risk to the reliability of the bulk power system (BPS). GPC established Facility Ratings that were not consistent with its FRM for approximately 13% of its transmission line Facilities and approximately 23% of its autobank transformer Facilities. GPC had to derate 43 transmission line Facilities, with derates ranging from 0.6 to 50.1% of the incorrect rating, and the largest derate being 454 MVA. GPC also had to derate 32 autobank transformer Facilities, with derates ranging from 0.4 to 40.3% of the incorrect rating, and the largest derate being 161 MVA. GPC's planning and operating simulation-based studies depend on accurate ratings to plan construction and to establish operating criteria such that the BPS can withstand a variety of pre-determined contingencies. GPC used inaccurate Facility Ratings in its planning and operating studies, which compromised the validity of the studies. However, GPC reviewed actual maximum line loadings over 2015 and determined that none of the 43 derated transmission line facilities experienced loadings in excess of the actual rating of the MLE. The majority of these facilities did not exceed 75% of the actual MLE rating. During 2015, none of the derated autobank transformer facilities experienced loadings in excess of the actual rating of the MLE. The majority of the

autobank transformer facilities with identified discrepancies did not exceed 75% of the actual MLE rating. Only 11 of the derates exceeded a threshold of 10% difference from the correct MLE. GPC typically sets first-level alarms in the EMS at 90% of the Facility Rating. Therefore, operators would have been alerted for loadings prior to exceeding the Facility Rating for 85.33% of the derated Facilities. No harm is known to have occurred.

III. <u>DISCOVERY INFORMATION</u>

METHOD OF DISCOVERY SELF-REPORT SELF-CERTIFICATION COMPLIANCE AUDIT COMPLIANCE VIOLATION INV SPOT CHECK COMPLAINT PERIODIC DATA SUBMITTAL EXCEPTION REPORTING	ESTIGA	ATION			
DURATION DATE(S) 6/18/2007 (when the Standard became mandatory and enfo (when GPC corrected all Facility Ratings).	orceable	on GPO	C) throu	ıgh 10/12	/2016
DATE DISCOVERED BY OR REPORTED TO REGION	NAL EN	ГІТҮ	7/2/20	015	
IS THE VIOLATION STILL OCCURRING IF YES, EXPLAIN	YES		NO	\boxtimes	
REMEDIAL ACTION DIRECTIVE ISSUED PRE TO POST JUNE 18, 2007 VIOLATION	YES YES		NO NO	\boxtimes	
IV. <u>MITIGATION INFO</u>	ORMA]	<u> </u>			
FOR FINAL ACCEPTED MITIGATION PLAN: MITIGATION PLAN NO. DATE SUBMITTED TO REGIONAL ENTITY DATE ACCEPTED BY REGIONAL ENTITY DATE APPROVED BY NERC DATE PROVIDED TO FERC	SERC: 1/3/20 1/19/2 2/16/2 2/17/2	017 017	2583		
IDENTIFY AND EXPLAIN ALL PRIOR VERSIONS TO REJECTED, IF APPLICABLE	HAT WE	ERE AC	CEPTI	ED OR	
MITIGATION PLAN COMPLETED YES 🖂	NO				
EXPECTED COMPLETION DATE EXTENSIONS GRANTED			5/1/20 N/A)17	

ACTUAL COMPLETION DATE	4/27/2017
DATE OF CERTIFICATION LETTER	5/1/2017
CERTIFIED COMPLETE BY REGISTERED ENTITY AS OF	4/27/2017
VERIFIED COMPLETE BY REGIONAL ENTITY ON	5/15/2017

ACTIONS TAKEN TO MITIGATE THE ISSUE AND PREVENT RECURRENCE To mitigate this violation, GPC:

- 1. Corrected the identified discrepancies in transmission line and autobank transformer Facility Ratings at GPC;
- 2. Utilized Southern Company's internal controls monitoring and testing program to obtain reasonable assurance that the issue with discrepancies in Facility Ratings identified in GPC is not a pervasive issue affecting other operating companies;
- 3. Developed a documented change management process for transmission Facility Ratings at GPC;
- 4. Developed a searchable Facility Rating element repository for the GPC operations personnel responsible for applying the MLE ratings in the EMS; and
- 5. Trained appropriate personnel in the change management of transmission Facility Ratings at GPC.

LIST OF EVIDENCE REVIEWED BY REGIONAL ENTITY TO EVALUATE COMPLETION OF MITIGATION PLAN OR MILESTONES (FOR CASES IN WHICH MITIGATION IS NOT YET COMPLETED, LIST EVIDENCE REVIEWED FOR COMPLETED MILESTONES)

SERC reviewed the following evidence submitted by GPC to evaluate completion of its Mitigation Plan:

- 1. Two emails from GPC explaining GPC reviewed 100% of its transmission lines and autobank circuits and corrected Facility Ratings;
- 2. Reports and lead sheets indicating SCS's completion of internal controls testing for affiliate companies subject to the requirements of FAC-008-3 (formerly FAC-009-1). The lead sheets include a description of the internal controls test steps, sample size, and evidence supporting the conclusions.
- 3. A document describing and diagramming the processes for determining and changing the Facility Ratings in the Georgia integrated transmission system;
- 4. Screen shots of the data repository for transmission lines and autobanks showing the data in the repository includes one-line diagrams and related databases with all elements of those lines with ratings at design temperatures and highlighted limiting elements:
- 5. A presentation discussing the Facility Rating change process, including the forms and responsibilities of individuals and groups; and
- 6. Agendas and attendance records for departmental meetings showing the Facility Rating changes presentation as an agenda item.

V. PENALTY INFORMATION

TOTAL ASSESSED PENALTY OR SANCTION OF **TWO HUNDRED THOUSAND DOLLARS** (\$200,000) FOR **ONE** VIOLATION OF RELIABILITY STANDARDS.

(1) REGISTERED ENTITY'S COMPLIANCE HISTORY

TIOUSLY FILED VIOLATIONS OF ANY OF THE INSTANT RELIABILITY IDARD(S) OR REQUIREMENT(S) THEREUNDER IN THE SERC REGION NO
LIST VIOLATIONS AND STATUS SERC considered GPC's and its affiliates' compliance history in determining the penalty. GPC has no prior filed violations of FAC-009-1 R1. GPC's affiliate, Alabama Power Company (APC) has one relevant prior noncompliance with FAC-009-1 R1: NERC violation ID SERC2016015499. SERC determined that APC's compliance history should not serve as a basis for aggravating the penalty. In SERC2016015499, after relocating a transmission support structure of a line, APC did not reevaluate the line's Facility Rating and failed to review the line's LiDAR data. To mitigate the violation, APC corrected the line's Facility Rating, reviewed span data for its higher voltage lines, and reinforced its change management process. None of APC's actions to mitigate its prior non-compliance would have identified or prevented the current violation.
ADDITIONAL COMMENTS Not applicable.
TIOUSLY FILED VIOLATIONS OF OTHER RELIABILITY STANDARD(S) OR JIREMENTS THEREUNDER IN THE SERC REGION NO
LIST VIOLATIONS AND STATUS GPC had previously filed violations of other NERC Reliability Standards and Requirements in the SERC Region. A Settlement Agreement covering one.

Requirements in the SERC Region. A Settlement Agreement covering one violation of FAC-003-1 R2 was filed with FERC under NP09-40-000 on September 25, 2009. On October 23, 2009, FERC issued an order stating that it would not engage in further review of the Notice of Penalty.

A Settlement Agreement covering three violations of PRC-005-1 R2 was filed with FERC under NP11-20-000 on November 5, 2010.⁵ On December 3, 2010. FERC issued an order stating that it would not engage in further review of the Notice of Penalty.

A Settlement Agreement covering one violation of PRC-023-1 R1; R1.1 was filed with FERC under NP12-27-000 on May 30, 2012.6 On June 29, 2012, FERC issued an order stating that it would not engage in further review of the Notice of Penalty.

 ⁴ NERC Violation ID SERC200800150.
 ⁵ NERC Violation IDs SERC200800240, SERC200800245, and SERC200900259.

⁶ NERC Violation ID SERC2011007157.

A Settlement Agreement covering one violation of FAC-003-1 R2 was filed with FERC under NP12-44-000 on August 31, 2012.⁷ On September 28, 2012, FERC issued an order stating that it would not engage in further review of the Notice of Penalty.

A Settlement Agreement covering one violation of PRC-005-1b R2; R2.1 was filed with FERC under NP14-35-000 on March 31, 2014.⁸ On April 30, 2014, FERC issued an order stating that it would not engage in further review of the Notice of Penalty.

GPC's affiliates also had previously filed violations of other NERC Reliability Standards and Requirements in the SERC Region. SERC determined that the prior compliance history of GPC's affiliates should not serve as a basis for aggravating the penalty. Aside from APC's FAC-009-1 R1 violation discussed above, the prior violations by GPC's affiliates are unrelated to the FAC-009-1 R1 violation at issue in this enforcement action.

ADDITIONAL COMMENTS Not applicable.

(2) THE DEGREE AND QUALITY OF COOPERATION BY THE REGISTEREI) ENTITY
(IF THE RESPONSE TO FULL COOPERATION IS "NO," THE ABBREVIATE	O NOP
FORM MAY NOT BE USED.)	

FULL COOPERATION	YES	\boxtimes	NO	
IF NO, EXPLAIN				

(3) THE PRESENCE AND QUALITY OF THE REGISTERED ENTITY'S COMPLIANCE PROGRAM

IS TH	ERE A	DOCU	MENT	ED CC	MPLI	ANCE	E PRO	GRAM
YES	\boxtimes	NO						
EXPL	AIN							

- a) Alabama Power Company: NP09-37-000 (September 25, 2009), NP10-34-000 (December 30, 2009), NP11-169-000 (April 29, 2011), NP12-27-000 (May 30, 2012), NP13-33-000 (April 30, 2013), and NP17-19-000 (February 28, 2017).
- b) Gulf Power Company: NP10-32-000 (December 30, 2009) and RC13-1-000 (October 31, 2012).
- c) Mississippi Power Company: NP10-33-000 (December 30, 2009), NP12-27-000 (May 30, 2012), NP14-14-000 (December 30, 2013), and NP17-15-000 (February 28, 2017).
- d) Southern Company Services, Inc. Gen.: NP12-27-000 (May 30, 2012) and NP13-27-000 (February 28, 2013).
- e) Southern Company Services, Inc. Trans: NP15-7-000 (October 30, 2014) and FFT publicly posted (August 31, 2015).
- f) Southern Power Company: NP10-35-000 (December 30, 2009) and NP12-27-000 (May 31, 2012).

⁷ NERC Violation ID SERC2011008763.

⁸ NERC Violation ID SERC2013012138.

⁹ FERC Docket numbers for previously filed violations:

GPC is a retail operating company under its parent holding company, Southern Company. GPC follows Southern Company's compliance framework manual, which has been in place since January 8, 2001. Details of the internal compliance program (ICP) are available internally through the corporate intranet. Compliance-related information is regularly communicated through various means including email newsletters, web-based, and/or classroom training sessions. The ICP is approved by the Southern Company ethics and compliance council, which consists of the compliance officers from each Southern Company operating company and major affiliates and the Southern Company compliance officer.

In 2016, Southern Company formally implemented a compliance monitoring and testing (CMAT) program for internal controls. The CMAT program identifies and documents Southern Company's strong internal controls across its business units and functions. The CMAT program includes performing and documenting independent testing of key controls, developing action plans to address any deficiencies identified during testing, and tracking completion of those action plans.

EXPLAIN SENIOR MANAGEMENT'S ROLE AND INVOLVEMENT WITH RESPECT TO THE REGISTERED ENTITY'S COMPLIANCE PROGRAM, INCLUDING WHETHER SENIOR MANAGEMENT TAKES ACTIONS THAT SUPPORT THE COMPLIANCE PROGRAM, SUCH AS TRAINING COMPLIANCE AS A FACTOR IN EMPLOYEE EVALUATIONS, OR OTHERWISE.

Southern Company's ICP is fully supported by company officers and senior management. Southern Company's ICP is regularly reviewed by senior management and is subject to internal and external audits on a periodic basis. The individual performance of employees is evaluated on a regular basis. These evaluations include an assessment of how the employee complied with laws, regulations and company policies.

In 2017, Southern Company restructured its Reliability Steering Committee (RSC), an executive oversight committee, to add members at the general manager level or higher from each business unit across its NERC functional areas. The RSC reviews all Southern Company violations of NERC Reliability Standards and identifies trends that may indicate broader compliance vulnerabilities across business units or operating companies.

(4) ANY ATTEMPT BY THE REGISTERED ENTITY TO CONCEAL THE VIOLATION(S) OR INFORMATION NEEDED TO REVIEW, EVALUATE OR INVESTIGATE THE VIOLATION.

YES	NO	\boxtimes
IF YES, E	XPLAIN	

(5) ANY EVIDENCE THE VIOLATION(S) WERE INTENTIONAL (IF THE RESPONSE IS "YES," THE ABBREVIATED NOP FORM MAY NOT BE USED.)
YES NO IF YES, EXPLAIN
(6) ANY OTHER MITIGATING FACTORS FOR CONSIDERATION
YES NO IF YES, EXPLAIN
(7) ANY OTHER AGGRAVATING FACTORS FOR CONSIDERATION
YES ☐ NO ⊠ IF YES, EXPLAIN
(8) ANY OTHER EXTENUATING CIRCUMSTANCES
YES NO IF YES, EXPLAIN
OTHER RELEVANT INFORMATION:
NOTICE OF ALLEGED VIOLATION AND PROPOSED PENALTY OR SANCTION ISSUED DATE: OR N/A \boxtimes
SETTLEMENT DISCUSSIONS COMMENCED DATE: 1/9/2018 OR N/A
NOTICE OF CONFIRMED VIOLATION ISSUED DATE: OR N/A \boxtimes
SUPPLEMENTAL RECORD INFORMATION DATE(S) OR N/A \boxtimes
REGISTERED ENTITY RESPONSE CONTESTED FINDINGS ☐ PENALTY ☐ BOTH ☐ NO CONTEST ☒
HEARING REQUESTED YES □ NO ☑ DATE OUTCOME APPEAL REQUESTED
SETTLEMENT AGREEMENT EXECUTED

DATE: 4/3/2018

EXHIBITS:

SOURCE DOCUMENT GPC Self-Report dated July 2, 2015

MITIGATION PLAN GPC Mitigation Plan submitted on January 3, 2017

CERTIFICATION BY REGISTERED ENTITY
GPC Certification of Completed Mitigation Plan dated May 1, 2017

VERIFICATION BY REGIONAL ENTITY This Disposition Document serves as SERC's Verification of Mitigation Plan Completion.



Attachment C

GPC's Self-Report for FAC-009-1 R1 Dated July 2, 2015

VIEW SELF-REPORT: FAC-008-3 R6. (COMPLETED)					
This item was submitted by Mark Pratt (mapratt@southernco.com) on 7/2/2015					
Please note that the circumstances under which an Entity would submit a Scope Expansion form are different from what would require a new Self-Report. Please review the material in this link to see clarifying information and examples of these differences before continuing with this form.					
FORM INFORMATION					
Registered Entity:	Georgia Power Company				
NERC Registry ID:	NCR01247				
JRO ID:					
CFR ID:					
Entity Contact Information:	Mark Pratt				
REPORTING INFORMATION					
Applicable Standard:	FAC-008-3				
Applicable Requirement:	R6.				
Applicable Sub Requirement(s):					
Applicable Functions:	ТО				
Has a Possible violation of this standard and requirement previously been reported or discovered:					
Has this Possible Violation previousl	y been reported to other Regions: No				
Date Possible Violation was discovered: 6/27/2015					
Beginning Date of Possible Violation: 1/1/2013					
End or Expected End Date of Possible Violation: 6/30/2015					
Is the violation still occurring?					
Provide detailed description and cause of Possible Violation:					
On June 27, 2015, as part of an effort to gather supporting evidence in response to a SERC data request, Georgia Power Company (GPC) discovered that the Facility Rating used by System Operations for the Clermont Junction 230/115kV autobank transformer is not consistent with GPC's Facility Ratings methodology. Specifically, GPC has been operating with the transformer bank nameplate rating of 300 MVA as the limiting element in the EMS system, but the connections to the main low-side bus and the main low-side bus conductors for each phase are rated at 285 MVA.					
A field verification of the series elements connecting the Clermont Junction 230/115 kV autobank transformer was completed on June 29, 2015. The transformer was placed in service on February 25, 2004. The configuration of the transformer connection results in all the output current from the autobank flowing through a single 1590 AAC riser jumper (per phase) and a section of the single conductor 1590 AAC main buss. The maximum rating based on the GPC Facility Rating Methodology for 1590 AAC conductor is 1430 amps or 285 MVA at 115 kV. GPC failed to identify this connection issue when reviewing the transformer elements and associated equipment to determine the transformer rating. GPC also failed to identify the planned operating configuration during the facility design to ensure the associated facilities for a transformer are selected to meet 130% of the nameplate rating of the transformer for new installations.					
Are Mitigating Activities in progress of	or completed? Yes				

If Yes, Provide description of Mitigating Activities:

Re-rate of the Clermont Junction 230/115kV autobank transformer in EMS to the correct Facility Rating on 6/30/2015.

Provide details to prevent recurrence:

Mitigating Activities to prevent reoccurrence are being developed and details on these activities will be provided in the Mitigation Plan.

12/31/2010									
Potential Impact to the Bulk Power System:	Minimal								
Actual Impact to the Bulk Power System:	Minimal								
Provide detailed description of Potential Ris	sk to Bulk Power System:								
	r operating to the incorrect Facility Rating on the Clerm n (BPS) based on the following facts and circumstances	ont Junction 230/115kV autobank transformer had minimal potential impact s:							
 The rating applied to the facility represents only a 5.3% overload (based on amps) to the actual limiting element in service. (1506 amps applied rating versus 1430 amps for the actual limiting element) Due to the natural cyclical loading of the transformer, even if the 5.3% overload had occurred damage to the 1590 AAC conductor and connectors would have progressed very slowly over a long period of time. The limiting rating of the 1590 AAC conductor is based on a 40°C (104°F) ambient temperature assumption. The temperature near Clermont Junction has only exceeded 100°F on five days since the bank was placed in service. The peak summer loading recorded for the transformer occurred on August 22, 2007 at 200.2 MVA with a max ambient temp of 100.1°F. This peak represents only 70% of the rating of the 1590 AAC limiting element. The all-time peak loading recorded for the transformer occurred on January 7, 2014 during the polar vortex event. The loading then was 206.2 MVA. However, the extreme lower ambient temperatures experienced at that time would have allowed for a higher rating on the 1590 AAC conductor under dynamic rating scenarios. Based on a loading review conducted by SCS Transmission Planning in the early part of 2015, the anticipated loads on the Clermont Junction 230/115 kV autobank transformer are not expected to exceed 201 MVA (71% of the 1590 AAC limiting element rating) throughout the planning horizon. 									
							Based on the minimal overload rating an low.	id the unlikely occurrence of an actual overload, the ch	ance of this condition initiating or contributing to a BPS fault would be very
							Provide detailed description of Actual Risk t	to Bulk Power System:	
	operating to the incorrect Facility Rating on the Clerm based on the following facts and circumstances:	ont Junction 230/115kV autobank transformer had no actual impact on the							
The loading on the actual limiting eleme outages or BES events.	nt at Clermont Junction substation never exceeded its	true limiting rating. Therefore, the issue did not result in any unplanned							
The maximum loading recorded since th January 7, 2014).	e transformer was placed in service equates to only 72	2% of the rating of the limiting element. (206.2 MVA loading occurred on							
Additional Comments:									
None.									
9 1	'	is confirmed, early submittal of a mitigation plan to address and remedy an ion of a violation. (See NERC Rules of Procedure, Appendix 4C, Section							

Date Mitigating Activities (including activities to prevent recurrence) are expected to be completed or were completed:



Attachment D

GPC's Mitigation Plan designated as SERCMIT012583 for FAC-009-1 R1 Submitted January 3, 2017

VIEW FORMAL MITIGATION PLAN: FAC-009-1 (REGION REVIEWING MITIGATION PLAN)

This item was signed by Helen Nalley (hrnalley@southernco.com) on 1/3/2017

×

This item was marked ready for signature by Mark Pratt (mapratt@southernco.com) on 12/20/2016

×

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" to this form.

[Yes] A.2 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:

Georgia Power Company

Company Address:

241 Ralph McGill Blvd.

Atlanta, Georgia 30308-3374

Compliance Registry ID:

NCR01247

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

Name:

Mark Pratt

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 Reliability Standard listed below.

Standard:

FAC-009-1

Requirement	Regional ID	NERC Violation ID	Date Issue Reported
R1.	SERC2015-402230	SERC2015015062	7/2/2015

C.2 Identify the cause of the Alleged or Confirmed violation(s) identified above:

On June 27, 2015, as part of an effort to gather supporting evidence in response to a SERC data request, Georgia Power Company (GPC) discovered that the Facility Rating used by System Operations for the Clermont Junction 230/115kV autobank transformer is not consistent with GPC's Facility Ratings methodology (FRM). Specifically, GPC has been operating with the transformer bank nameplate rating of 300 MVA as the limiting element in the EMS system, but the connections to the main low-side bus and the main low-side bus conductors for each phase are rated at 285 MVA.

A field verification of the series elements connecting the Clermont Junction 230/115 kV autobank transformer was completed on June 29, 2015. The transformer was placed in service on February 25, 2004. The configuration of the transformer connection results in all the output current from the autobank flowing through a single 1590 AAC riser jumper and a section of the single conductor 1590 AAC main buss. The maximum rating based on the GPC Facility Rating Methodology for 1590 AAC conductor is 1430 amps per phase or 285 MVA at 115 kV. GPC failed to identify this connection issue when reviewing the transformer elements and associated equipment to determine the transformer rating. GPC also failed to identify the planned operating configuration during the facility design to ensure the associated facilities for a transformer are selected to meet 130% of the nameplate rating of the transformer for new installations.

In an effort to determine whether the issue with incorrect Facility Ratings at Georgia went beyond the single discrepancy identified on the Clermont Junction 230/115kV autobank, SCS Operations Compliance, in conjunction with Georgia Power management, conducted an Extent of Condition review of Georgia Power's transmission line facilities and autobank transformer facilities which ultimately resulted in a 100% review due to additional findings. In all, 91 transmission line facilities and 32 autobank transformer facilities were found to have discrepancies in one or more segments which changed the most limiting element (MLE) of the overall facility.

The primary cause of this violation is ineffective change management for Facility Ratings. Two main contributors are as follows:

- 1. Reliance on the assumption (specified in the FRM) that connection facilities are designed to meet 130% of the autobank transformer rating.
- 2. The lack of a searchable Facility Rating element repository for the GPC Operations personnel responsible for applying the MLE ratings in the EMS.

Attachments ()

C.3 Provide any additional relevant information regarding the Alleged or Confirmed violations associated with this MitigationPlan:

No additional information

Attachments ()

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:

Georgia Power Company (GPC) will complete the following mitigating actions to correct the alleged violation identified in Section C.1:

- 1. Correct the identified discrepancies in transmission line and autobank transformer Facility Ratings at GPC.
- 2. Utilize Southern Company's internal controls monitoring and testing program to obtain reasonable assurance that the issue with discrepancies in Facility Ratings identified in Georgia is not a pervasive issue affecting other operating companies. [Sampling details provided in Milestone Activity description Sec. D.3]
- 3. Develop a documented change management process for transmission Facility Ratings at GPC.
- 4. Develop a searchable Facility Rating element repository for the GPC Operations personnel responsible for applying the MLE ratings in the EMS.
- 5. Train appropriate personnel in the change management of transmission Facility Ratings at GPC.

Attachments ()

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:

5/1/2017

D.3 Enter Milestone Activities, with due dates, that your organization is proposing, or has completed, for this Mitigation Plan:

Correct the identified discrepancies in transmission line and autobank transformer Facility Ratings at GPC

Milestone Completed (Due: 11/1/2016 and Completed 11/1/2016)

Bring the Facility Ratings for transmission lines and autobank transformers into alignment with the Most Limiting Element (MLE) for each Facility.

This MP milestone ensures that Georgia Power is brought back into compliance with FAC-008-3.

Utilize Southern Company's internal controls monitoring and testing program to obtain reasonable assurance that the issue with discrepancies in Facility Ratings identified at GPC is not a pervasive issue affecting other operating companies.

Milestone Completed (Due: 11/1/2016 and Completed 11/1/2016)

SCS Operations Compliance to perform independent sampling of transmission line and autobank transformer facilities in affiliate entities to determine pervasiveness of errors in Facility Ratings across Southern. This will be accomplished by the following steps:

- Sample transmission and autobank transformer facilities from a listing of the full population of such facilities (Target is 10%±)
- Request the ratings information from the affiliate for all sampled facilities
- Request the information needed to show how the ratings are determined for the facility/elements selected, including the Most Limiting Element
- Verify agreement between Facility Ratings and Most Limiting Element
- Record the results of testing in the BWise application and provide results to SERC [Note: Mitigating actions will be developed and tracked separately for deficiencies identified though this expanded review.]

Develop a documented change management process for transmission Facility Ratings at GPC

Milestone Pending (Due: 3/1/2017)

Develop a documented change management process for transmission Facility Ratings at Georgia Power Company.

This MP milestone addresses the root cause of the violations by ensuring that a change management process is developed and documented that defines expectations and identifies accountable roles to ensure field changes that impact transmission Facility Ratings are identified, communicated and factored into the Facility Ratings values.

Develop a searchable Facility Rating element repository for the GPC personnel responsible for applying the MLE ratings in the EMS

Milestone Pending (Due: 3/31/2017)

Develop a repository (e.g., spreadsheet or database or other application) that includes all the transmission line and autobank transformer facilities for Georgia Power Company. The repository will itemize the elements and their individual ratings so that the Most Limiting Element for each Facility can be readily identified.

This MP milestone addresses the lack of a searchable Facility Rating element repository for the GPC Operations personnel responsible for applying the MLE ratings in the EMS.

Train appropriate personnel in the change management of transmission Facility Ratings at Georgia Power Company.

Milestone Pending (Due: 5/1/2017)

Train appropriate personnel in the change management of transmission Facility Ratings at Georgia Power Company.

This MP milestone addresses the root cause of the violations by ensuring that personnel responsible for maintaining accurate transmission Facility Ratings information understand the process and management's expectations.

SECTION E: INTERIM AND FUTURE RELIABILITY RISK

- E.1 Abatement of Interim BPS Reliability Risk: While your organization is implementing this Mitigation Plan the reliability of the Bulk Power Supply (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):
- (i) Georgia Power Company asserts that the reliability of the Bulk Power Supply (BPS) does not remain at higher risk and will not be negatively impacted prior to full completion of the action items in this Mitigation Plan based on the following:
- 1. Because management's review included 100% of the transmission line and autobank transformer facilities in Georgia Power Company and because corrections to Facility Rating discrepancies were initiated as they were identified, there remains no reliability risk to operations from inaccurate Facility Ratings.
- (ii) Therefore, Georgia Power Company does not plan or propose to implement any additional interim mitigating actions.

Attachments ()

E.2 Prevention of Future BPS Reliability Risk: Describe how successful completion of this Mitigation Plan will prevent or minimize the probability that your organization incurs further risk of Alleged violations of the same or similar reliability standards requirements in the future. (Additional detailed information may be provided as an

attachment):

Successful completion of this Mitigation Plan will minimize the probability that Georgia Power Company incurs further violations of FAC-008-3 by ensuring a process is in place to effectively manage changes to transmission line and autobank transformer facilities to ensure ongoing accuracy of Facility Ratings.

Attachments ()

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 SERC 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:
 - I am Helen Nalley of Georgia Power Company
 - I am qualified to sign this Mitigation Plan on behalf of Georgia Power Company
 - I understand Georgia Power Company's obligations to comply with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure, including Appendixe 4 (Compliance Monitoring and Enforcement Program of the North American Electric Reliability Corporation (NERC CMEP))
 - I have read and am familiar with the contents of this Mitigation Plan
 - . Georgia Power Company agrees to comply with, this Mitigation Plan, including the timetable completion date, as accepted by SERC and approved by NERC

SECTION G: REGIONAL ENTITY CONTACT

SERC Single Point of Contact (SPOC)



Attachment E

GPC's Certification of Mitigation Plan Completion for FAC-009-1 R1 Submitted May 1, 2017

VIEW MITIGATION PLAN CLOSURE: FAC-009-1 (MITIGATION PLAN CLOSURE COMPLETED)

This item was signed by Kenny Shockley (KMSHOCKL@southernco.com) on 5/1/2017

This item was marked ready for signature by Mark Pratt (mapratt@southernco.com) on 5/1/2017

MEMBER MITIGATION PLAN CLOSURE

All Mitigation Plan Completion Certification submittals shall include data or information sufficient for SERC to verify completion of the Mitigation Plan. SERC may request such additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6) Data or information submitted may become part of a public record upon final disposition of the possible violation, therefore any confidential information contained therein should be marked as such in accordance with the provisions of Section 1500 of the NERC Rules of Procedure.

Name of Registered Entity submitting certification:

Georgia Power Company

Name of Standard of mitigation violation(s):

FAC-009-1

Requirement	Tracking Number	NERC Violation ID
R1.	SERC2015-402230	SERC2015015062

Date of completion of the Mitigation Plan:

4/27/2017

Correct the identified discrepancies in transmission line and autobank transformer Facility Ratings at GPC

Milestone Completed (Due: 11/1/2016 and Completed 10/12/2016)

Attachments (2)

Bring the Facility Ratings for transmission lines and autobank transformers into alignment with the Most Limiting Element (MLE) for each Facility.

This MP milestone ensures that Georgia Power is brought back into compliance with FAC-008-3

Utilize Southern Company's internal controls monitoring and testing program to obtain reasonable assurance that the issue with discrepancies in Facility Ratings identified at GPC is not a pervasive issue affecting other operating companies.

Milestone Completed (Due: 11/1/2016 and Completed 11/1/2016)

Attachments (1)

SCS Operations Compliance to perform independent sampling of transmission line and autobank transformer facilities in affiliate entities to determine pervasiveness of errors in Facility Ratings across Southern. This will be accomplished by the following steps:

- Sample transmission and autobank transformer facilities from a listing of the full population of such facilities (Target is 10%±)
- · Request the ratings information from the affiliate for all sampled facilities
- Request the information needed to show how the ratings are determined for the facility/elements selected, including the Most Limiting Element
- Verify agreement between Facility Ratings and Most Limiting Element
- Record the results of testing in the BWise application and provide results to SERC [Note: Mitigating actions will be developed and tracked separately for deficiencies identified though this expanded review.]

Develop a documented change management process for transmission Facility Ratings at GPC

Milestone Completed (Due: 3/1/2017 and Completed 3/1/2017)

Develop a documented change management process for transmission Facility Ratings at Georgia Power Company.

This MP milestone addresses the root cause of the violations by ensuring that a change management process is developed and documented that defines expectations and identifies accountable roles to ensure field changes that impact transmission Facility Ratings are identified, communicated and factored into the Facility Ratings

Develop a searchable Facility Rating element repository for the GPC personnel responsible for applying the MLE ratings in the EMS

Milestone Completed (Due: 3/31/2017 and Completed 3/30/2017)

Attachments (3)

Develop a repository (e.g., spreadsheet or database or other application) that includes all the transmission line and autobank transformer facilities for Georgia Power Company. The repository will itemize the elements and their individual ratings so that the Most Limiting Element for each Facility can be readily identified.

This MP milestone addresses the lack of a searchable Facility Rating element repository for the GPC Operations personnel responsible for applying the MLE ratings in the EMS

Train appropriate personnel in the change management of transmission Facility Ratings at Georgia Power Company.

Milestone Completed (Due: 5/1/2017 and Completed 4/27/2017)

Train appropriate personnel in the change management of transmission Facility Ratings at Georgia Power Company.

This MP milestone addresses the root cause of the violations by ensuring that personnel responsible for maintaining accurate transmission Facility Ratings information

understand the process and management's expectations.

Summary of all actions described in Part D of the relevant mitigation plan:

- 1. Corrected the identified discrepancies in transmission line and autobank transformer Facility Ratings at GPC.
- 2. Utilized Southern Company's internal controls monitoring and testing program to obtain reasonable assurance that the issue with discrepancies in Facility Ratings identified in Georgia is not a pervasive issue affecting other operating companies. [Sampling details provided in Milestone Activity description Sec. D.3]
- 3. Developed a documented change management process for transmission Facility Ratings at GPC.
- 4. Developed a searchable Facility Rating element repository for the GPC Operations personnel responsible for applying the MLE ratings in the EMS.
- 5. Trained appropriate personnel in the change management of transmission Facility Ratings at GPC.

Description of the information provided to SERC for their evaluation[★]

Evidence attached includes emails, spreadsheets, screen captures from databases, presentation materials, meeting agendas and attendance rosters, etc.

I certify that the Mitigation Plan for the above-named violation has been completed on the date shown above. In doing so, I certify that all required Mitigation Plan actions described in Part D of the relevant Mitigation Plan have been completed, compliance has been restored, the above-named entity is currently compliant with all of the requirements of the referenced standard, and that all information submitted is complete, true and correct to the best of my knowledge.