UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET, SW, SUITE 23T85
ATLANTA, GEORGIA 30303-8931

November 21, 2008

EA-08-324

Mr. David A. Baxter
Vice President
Duke Power Company, LLC
d/b/a Duke Energy Carolinas, LLC
Oconee Nuclear Station
7800 Rochester Highway
Seneca, SC 29672

SUBJECT: OCONEE NUCLEAR STATION - NRC INSPECTION REPORT 05000269/2008010, 05000270/2008010 AND 05000287/2008010; PRELIMINARY GREATER THAN GREEN FINDING

Dear Mr. Baxter:

On June 30, 2008, the U.S. Nuclear Regulatory Commission (NRC) completed a quarterly integrated inspection at your Oconee Nuclear Station. The inspection findings were documented in NRC Inspection Report 05000269/2008003, 05000270/2008003, and 05000287/2008003, which was issued on July 25, 2008.

Section 4OA3.1 of that report identified Unresolved Item (URI) 05000269/2008003-02, which concerned a loss of reactor coolant system (RCS) inventory while on decay heat removal. Subsequent to additional inspection, the performance deficiency was identified as a failure to implement a main generator automatic voltage regulator (AVR) maintenance procedure that met the standards/expectations of Nuclear System Directive (NSD) 703, Administrative Instructions for Technical Procedures, to achieve the intended purpose by being technically accurate, safe, and complete. More specifically, AVR maintenance procedure IP/0/B/2005/001, Main Generator Automatic Voltage Regulator Maintenance and Channel Transfer, failed to identify and electrically isolate all AVR trip outputs to the main generator lockout relays. Consequently, during AVR maintenance in Unit 1 on April 15, 2008, a main generator lockout occurred, resulting in a loss of power event that ultimately led to a loss of RCS inventory (70 inches to 54 inches on LT-5) while in Mode 6 (reactor head closure bolts de-tensioned) on decay heat removal. As such, this event challenged the safety function of inventory control. In addition to the above inadequacy, the AVR procedure was also not coded to prevent it from being performed during even higher risk periods of reduced inventory, as had been the case from 12 hours (12.5 inches on LT-5) to six hours (23 inches on LT-5) prior to the actual event.

This finding was assessed based on the best available information, including influential assumptions, using the applicable Significance Determination Process (SDP) and was preliminarily determined to be a Greater Than Green Finding. Enclosed is a copy of the SDP Phase 3 analysis. It reflects a finding of greater than very low safety significance because of the increased likelihood of core damage. The significance of the finding is heavily influenced by human diagnostic and recovery actions. Because of these human actions and their interdependencies, the result was classified as Greater Than Green. The finding does not

represent a current safety concern because AVR maintenance procedure IP/0/B/2005/001 was put on hold until appropriate procedural changes were made.

For administrative purposes, this finding is identified as FIN 05000269/2008010-01, Failure to Implement an Adequate AVR Maintenance Procedure. Accordingly, URI 05000269/2008003-02 is closed. In addition, this finding is considered to have a cross-cutting aspect of complete, accurate, and up-to-date procedures [H.2(c)], as described in the resources component of the human performance cross-cutting area.

In accordance with Inspection Manual Chapter (IMC) 0609, we intend to complete our evaluation using the best available information and issue our final determination of safety significance within 90 days of the date of this letter. The significance determination process encourages an open dialogue between the staff and the licensee; however, the dialogue should not impact the timeliness of the staff's final determination. Before we make a final decision on this matter, we are providing you an opportunity to: (1) present to the NRC your perspectives on the facts and assumptions, used by the NRC to arrive at the finding and its significance, at a Regulatory Conference or (2) submit your position on the finding to the NRC in writing. If you request a Regulatory Conference, it should be held within 30 days of the receipt of this letter and we encourage you to submit supporting documentation at least 1 week prior to the conference in an effort to make the conference more efficient and effective. If a Regulatory Conference is held, it will be open for public observation. The NRC will also issue a press release to announce the conference. If you decide to submit only a written response, such a submittal should be sent to the NRC within 30 days of the receipt of this letter.

Please contact Mr. Steven Rose at (404) 562-4647 within 10 business days of the date of your receipt of this letter to notify the NRC of your intentions. If we have not heard from you within 10 days, we will continue with our significance determination and you will be advised by separate correspondence of the results of our deliberations on this matter.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Leonard D. Wert, Jr., Director
Division of Reactor Projects

Docket Nos.: 50-269, 50-270, 50-287
License Nos.: DPR-38, DPR-47, DPR-55

Enclosure: SDP Phase 3

cc w/encl.: (See page 3)

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cc w/encl.: (See page 3)

X PUBLICLY AVAILABLE ☐ NON-PUBLICLY AVAILABLE ☐ SENSITIVE X NON-SENSITIVE

ADAMS: ☐ Yes ACCESSION NUMBER:_____ ☐ SUNSI REVIEW COMPLETE

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SIGNATURE	SDR /RA/	via telecom	CFE /RA/	JHM /RA/	via email	via email	via telecon
NAME	SRose	JMitman	CEvans	JMoorman	GGulla	MAshley	AHutto
DATE	11/14/2008	11/13/2008	11/19/2008	11/24/2008	11/18/2008	11/18/2008	11/13/2008
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: I:\RPB1\OCONEE\SDP AND SERP INFO\OCOU1DRAINDOWN\OCO U1 DRAIN DOWN CHOICE LTR.DOC

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Letter to David A. Baxter from Leonard D. Wert, Jr. dated November 21, 2008

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