



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

May 7, 2013

George T. Hamrick, Vice President  
Shearon Harris Nuclear Power Plant  
5413 Shearon Harris Rd  
New Hill, NC 27562-0165

SUBJECT: SHEARON HARRIS NUCLEAR POWER PLANT, UNIT NO. 1 – REQUEST  
FOR ADDITIONAL INFORMATION REGARDING LICENSE AMENDMENT  
REQUEST TO REVISE TECHNICAL SPECIFICATION TABLE 3.3-4  
DEGRADED VOLTAGE TIME DELAY VALUES (TAC NO. ME9892)

Dear Mr. Hamrick:

By letter to the U.S. Nuclear Regulatory Commission (NRC) dated November 29, 2012 (Agencywide Document Access and Management System (ADAMS) Accession No. ML123350104), as supplemented by letter dated January 3, 2013 (ADAMS Accession No. ML13003A214), Carolina Power & Light Company (the licensee), doing business as Duke Energy, Inc., submitted a license amendment request for Shearon Harris Nuclear Power Plant, Unit 1. The license amendment would revise Technical Specification (TS) Table 3.3-4 associated with 6.9 KiloVolt Emergency Bus Secondary Undervoltage time delay values to resolve a nonconservative TS.

The NRC staff is reviewing your submittal and has determined that additional information is required to complete the review. The specific information requested is addressed in the enclosure to this letter. During a discussion with your staff on May 1, 2013, it was agreed that you would provide a response 30 days from the date of this letter.

The NRC considers that timely responses to requests for additional information help ensure sufficient time is available for the NRC staff review and contribute toward the NRC's goal of efficient and effective use of staff resources.

Please contact me at (301) 415-3302, if you have any questions.

Sincerely,

*Araceli T. Billoch Colón*

Araceli Billoch Colón, Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-400

Enclosure: Request for Additional Information

cc w/encl: ListServ

REQUEST FOR ADDITIONAL INFORMATION

REGARDING SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1

LICENSE AMENDMENT REQUEST TO REVISE TECHNICAL SPECIFICATION TABLE 3.3-4

DEGRADED VOLTAGE TIME DELAY VALUES

DOCKET NO. 50-400

By letter dated November 29, 2012 (Agencywide Document Access and Management System (ADAMS) Accession No. ML123350104), as supplemented by letter dated January 3, 2013 (ADAMS Accession No. ML13003A214), Carolina Power & Light Company (the licensee), doing business as Duke Energy, Inc., submitted a license amendment request for Shearon Harris Nuclear Power Plant, Unit 1, to revise Technical Specification (TS) Table 3.3-4 associated with 6.9 KiloVolt (kV) Emergency Bus Secondary Undervoltage time delay values to resolve a nonconservative TS. To complete its review, the U.S. Nuclear Regulatory Commission staff requests the following additional information.

1. Page 6 of Calculation No. E2-0005.09, states that the DGVR [Degraded Voltage Relay] control logic scheme is documented in Control Wiring Diagrams 6-B-401, Sheets 1711, 1712, 1731, and 1732.

Provide a copy of the above stated control wiring diagrams.

2. Page 8d of Calculation No. E2-0005.09, states the following:

"Attachment O contains timelines for various accident scenarios. These time lines were used to develop the analytical limit for the maximum time delay. The time lines incorporate logic changes and time delay changes expected to be made by EC 84101. The logic changes bypass the SAB 10 second time delay relay for a safety injection signal coincident with a degraded voltage signal (from the 'w SIAS' timer). The time delay change is for relay PGSA (PGSB) from 1.5 seconds to 2.5 seconds."

Provide a copy of the drawings that show the logic changes and time delay changes expected to be made by EC 84101.

3. Page 8d of Calculation No. E2-0005.09, states the following:

"Calculation E-6000, Tab A contains a graphical representation of 6.9kV safety bus voltage versus time for the safeguards sequencing transient with minimum switchyard voltage. The graph shows that the bus voltage decreases below the maximum dropout of the degraded voltage relay multiple times during the sequence, but recovers above the maximum reset value before the next load starts in all cases."

Enclosure

Provide a copy of the graphical representation of 6.9kV safety bus voltage versus time for the safeguards sequencing transient. Also, provide a tabulation of the loads sequenced versus time whose voltage impact is provided in this graphical representation.

4. Provide a copy of the one-line diagram(s) of 6.9kV emergency buses that shows the connection of the degraded voltage relays and emergency load feeds from the 6.9kV emergency buses.

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/RA/

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\*By memo, as revised by email dated 04/24/13

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