



Serial: NPD-NRC-2009-041

March 18, 2009

10CFR52.79

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555-0001

**SHEARON HARRIS NUCLEAR POWER PLANT, UNITS 2 AND 3
DOCKET NOS. 52-022 AND 52-023
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 057 RELATED TO
TRANSMISSION GRID STABILITY**

Reference: Letter from Manny Comar (NRC) to James Scarola (PEC), dated February 18, 2009, "Request for Additional Information Letter No. 057 Related to SRP Section 08.02 for the Shearon Harris Units 2 and 3 Combined License Application"

Ladies and Gentlemen:

Progress Energy Carolinas, Inc. (PEC) hereby submits our response to the Nuclear Regulatory Commission's (NRC) request for additional information provided in the referenced letter.

A response to the NRC request is addressed in the enclosure. The enclosure also identifies that no changes will be needed in a future revision of the Shearon Harris Nuclear Power Plant Units 2 and 3 application.

If you have any further questions, or need additional information, please contact Bob Kitchen at (919) 546-6992, or me at (919) 546-6107.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on March 18, 2009.

Sincerely,

A handwritten signature in cursive script that reads 'Garry D. Miller'.

Garry D. Miller
General Manager
Nuclear Plant Development

cc : U.S. NRC Director, Office of New Reactors/NRLPO
U.S. NRC Office of Nuclear Reactor Regulation/NRLPO
U.S. NRC Region II, Regional Administrator
U.S. NRC Resident Inspector, SHNPP Unit 1
Mr. Manny Comar, U.S. NRC Project Manager

DO84
NRC

bc : Robert Kitchen, Manager-Nuclear Plant Licensing
Chris Kamilaris, Director – Fleet ISupport Services
Tillie Wilkins, NPD-Licensing
John O'Neill, Jr. (Pillsbury Winthrop Shaw Pittman, LLP)
A. K. Singh (Sargent & Lundy, LLC)
Jim Steele (CH2M HILL)
John Archer (WorleyParsons)
Mark Steele (Sargent & Lundy, LLC)
NGG NPD Records Inbox
File: NGG-NPD (Dawn Bisson)

**Shearon Harris Nuclear Power Plant Units 2 and 3
Response to NRC Request for Additional Information Letter No. 057 Related to SRP
Section 08.02 for the Shearon Harris Units 2 and 3 Combined License Application, Dated
February 18, 2009**

<u>NRC RAI #</u>	<u>Progress Energy RAI #</u>	<u>Progress Energy Response</u>
08.02-12	H-0426	Response enclosed – see following pages

NRC Letter No.: HAR-RAI-LTR-057

NRC Letter Date: February 18, 2009

NRC Review of Final Safety Analysis Report

NRC RAI NUMBER: 08.02-12

Text of NRC RAI:

Regulatory Guide 1.206, "Combined License Applications for Nuclear Power Plants (LWR Edition)," Section C.III, Regulatory Position C.I.8.2.2 states that "[f]or all designs, the COL applicant should provide an analysis of the stability of the grid. This analysis should include the worst-case disturbances for which the grid has been analyzed and considered to remain stable and should describe how the stability of the grid is continuously studied as the loads grow and additional transmission lines and generators are added."

In this regard, describe: 1) how the applicant will analyze the stability of the transmission grid on an ongoing basis, 2) how these studies are updated as load forecasts and future generation / transmission changes evolve, and 3) how often these studies will be performed to assess future system performance.

PGN RAI ID #: H-0426

PGN Response to NRC RAI

The stability of the transmission grid will be analyzed on an ongoing basis as required by NERC Reliability Standards (ref. www.nerc.com). In addition, nuclear plant specific interface requirements are addressed under NERC Reliability Standard NUC-001 which requires that the Nuclear Plant and Transmission organizations enter into an agreement to establish the nuclear plant interface requirements (NPIRs) with respect to the transmission grid. This standard requires Transmission organizations to incorporate the agreed upon NPIRs into the transmission planning process. PEC will follow this standard to ensure the agreed upon requirements of Harris 2 and 3 are included in the transmission planning process. Transmission planning routinely performs grid analyses to determine the adequacy of the transmission system to meet current and future needs. Specific studies are performed on an as needed basis and annual screening studies are performed to identify future needs in a timely manner.

Associated HAR COL Application Revisions:

No COLA revisions have been identified associated with this response.

Attachments/Enclosures:

None