Progress Energy

Serial: NPD-NRC-2009-078
April 27, 2009

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
SUPPLEMENTAL INFORMATION FOR SAFETY REVIEW: HYDROLOGY NATIVE FILES

Reference: Letter from James Scarola (PEC) to U.S. Nuclear Regulatory Commission (NRC), dated February 18, 2008, "Application for Combined License for Shearon Harris Nuclear Power Plant Units 2 and 3, NRC Project Number 738", Serial NPD-NRC-2008-001

Ladies and Gentlemen:

In the referenced letter, Progress Energy – Carolinas, Inc. (PEC) submitted an application for a combined construction and operating license (COL) for the Shearon Harris Nuclear Power Plant Units 2 and 3 (HAR 2 and 3).

On February 10-11, 2009, an NRC team conducted a follow-up Hydrology Audit to gather information to assist in the review of the Final Safety Analysis Report (FSAR) Section 2.4 submitted as part of the application. The purpose of this letter is to provide calculation native files requested by the NRC team during that visit which are now ready for submittal.

The supplemental information contained in the files on the attached CD is provided to support the NRC's review of the HAR 2 and 3 FSAR, but does not comply with the requirements for electronic submission in the NRC Guidance Document. The NRC Staff requested the files be submitted in their native formats, required for utilization in the software employed to support the FSAR development.

The files provided on the attached CD are of a nature that is not easily convertible to PDF output files. Furthermore, PEC understands that converting the information to PDF output files would not serve the underlying purpose of the submittal; i.e., to provide the raw, unprocessed data to enable reviewers to evaluate software used in the HAR 2 and 3 application.

Enclosure 1 provides an outline of major files and folders that are included on the CD provided as Attachment 1.

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

Progress Energy Carolinas, Inc.
P.O. Box 1551
Raleigh, NC 27602

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NRO

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

Executed on April 27, 2009.

Sincerely,

Garry D. Miller
General Manager
Nuclear Plant Development

Enclosure and Attachment

cc : U.S. NRC Director, Office of New Reactors/NRLPO (w/o Attachment)
U.S. NRC Office of Nuclear Reactor Regulation/NRLPO (w/o Attachment)
U.S. NRC Region II, Regional Administrator (w/o Attachment)
U.S. NRC Resident Inspector, SHNPP Unit 1 (w/o Attachment)
Mr. Manny Comar, U.S. NRC Project Manager (w/ 4 copies of Attachment)

The following items are being provided on the Attachment 1 CD:

CD Item	Description
BATHTUB_IO folder	The water quality in Harris Reservoir may be affected by introduction of water from the Cape Fear River. A BATHTUB model for Harris Reservoir was developed to assess the potential impacts of inflows from the Cape Fear River. This folder contains files associated with this BATHTUB model.
Visual_Plume_IO folder	The USEPA's VISUAL PLUMES model was used to evaluate the impacts of the submerged aquatic plume due to adding the cooling tower blowdown discharge from the two proposed HAR units to Harris Reservoir. This folder contains files associated with this VISUAL PLUMES model.
Storage_IO folder	This folder contains stage volume and area curve data for the Main and Auxiliary dams as requested by NRC staff.
PMF Analyses:	This item provides the data analyses performed as part of the Probable Maximum Flood (PMF) calculations using HEC-RAS and HEC-HMS models; including the following major folders and files: **HEC-HMS Base Case** folder **HEC-HMS Peaking Case** folder **HEC-RAS_HAR** folder **Infiltration Loss.xls** file **Peaking Analysis.xls** file **Snyder UH Parameters.xls** file **Wind-Wave Action-HAR2&3 VAL.xls** file **Report.rep.txt** file