Progress Energy

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February 13, 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
SUPPLEMENTAL INFORMATION FOR ENVIRONMENTAL REVIEW: CALCULATION NATIVE
FILES – COOLING TOWER PLUME MODELING

Reference: Letter from Garry D. Miller (PEC) to U.S. Nuclear Regulatory Commission (NRC),
dated February 12, 2009, "Response to Request for Additional Information
Regarding the Environmental Review"

Ladies and Gentlemen:

In the referenced letter, Progress Energy Carolinas, Inc. (PEC) noted that the input and output
files for the modeling analysis for cooling tower plumes would be provided under a separate cover
due to the requirements for native file submittal (see NRC RAI # 5.3.3.1-1 and PGN RAI # H-295).
The purpose of this letter is to submit these calculation native files.

The supplemental information contained in the files on the attached CD is provided to support the
NRC's review of the Shearon Harris Nuclear Power Plant Units 2 and 3 (HAR) Environmental
Report (ER), 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 ER development.

As discussed with the NRC's environmental project manager responsible for review of the HAR
ER, the data 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 application.

Enclosure 1 provides a list of folders with the requested data files that are included on the
attached CD (Attachment 5.3.3.1-1 SACTI Native Files).

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

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NRO

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

Executed on February 13, 2009.

Sincerely,

Garry D. Miller
General Manager
Nuclear Plant Development

Enclosure/Attachment

cc (with 2 copies of attached CD):
      Dr. Donald Palmrose, U.S. NRC Environmental Project Manager

cc (without attached CD):
      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

Attachment 5.3.3.1-1A   (Electronic input and output files and assumptions for SACTI modeling analysis)

The following electronic files are being provided on this Attachment CD:

File Name	Description
Case 1 (HAR Units 2 and 3)	
Case 1 Assumptions.pdf	Assumption worksheets for determining input parameters for SACTI model.
Preprocessor Model	
AllYears.tap	Meteorological surface data
FORT.2	SACTI created binary input file (Tables)
FORT.3	SACTI created binary input file (Plume)
FORT.4	SACTI created binary input file (Tables)
mixht.tap	Bi-Daily mixing height data
PREP.EXE	Preprocessor Model – executable file
PREP.OUT	Preprocessor Model – output file
PREP.USR	Preprocessor Model – user created input file
Plume Model	
Includes a copy of FORT.3 from above.	
FORT.8	SACTI created binary input file (Tables)
MULT.EXE	Plume Model – executable file
MULT.OUT	Plume Model – output file
MULT.USR	Plume Model – user created input file
Tables Model	
Includes copies of FORT.2, FORT.4, and FORT.8 from above.	
FORT.9	SACTI created binary input file (PagePlot – not used)
TABLES.EXE	Tables Model – executable file
TABLES.OUT	Tables Model – output file
TABLES.USR	Tables Model – user created input file
Case 2 (HAR Units 2 and 3, HNP Unit 1)	
Case 2 Assumptions.pdf	Assumption worksheets for determining input parameters for SACTI model.

Preprocessor Model

AllYears.tap	Meteorological surface data
FORT.2	SACTI created binary input file (Tables)
FORT.3	SACTI created binary input file (Plume)
FORT.4	SACTI created binary input file (Tables)
mixht.tap	Bi-Daily mixing height data
PREP.EXE	Preprocessor Model – executable file
PREP.OUT	Preprocessor Model – output file
PREP.USR	Preprocessor Model – user created input file

Plume Model

Includes a copy of FORT.3 from above.

FORT.8	SACTI created binary input file (Tables)
MULT.EXE	Plume Model – executable file
MULT.OUT	Plume Model – output file
MULT.USR	Plume Model – user created input file

Tables Model

Includes copies of FORT.2, FORT.4, and FORT.8 from above.

FORT.9	SACTI created binary input file (PagePlot – not used)
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