



**James Scarola**  
Senior Vice President and Chief Nuclear Officer  
Progress Energy Carolinas, Inc.

Serial: NPD-NRC-2008-016  
May 12, 2008

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

**Subject: Supplemental Meteorological Data in Support of Combined License Application for Shearon Harris Nuclear Power Plant Units 2 and 3 Docket Nos. 52-022 and 52-023**

**Reference: Application for Combined License for Shearon Harris Nuclear Power Plant Units 2 and 3, Letter NPD-NRC-2008-001, Dated February 18, 2008**

Gentlemen:

In the referenced letter, Progress Energy Carolinas, Inc. (PEC), submitted an application for a combined construction and operating license (COL) for Shearon Harris Nuclear Power Plant Units 2 and 3 (HAR 2 and 3), located in Wake County, NC. That submittal consisted of ten parts, as described in the referenced letter, and an additional part containing Safeguards Information provided under separate cover.

By letter NPD-NRC-2008-003, dated February 18, 2008, PEC also submitted supplemental information in support of the review of the HAR 2 and 3 COL application. The information consisted of a CD-ROM containing the following onsite meteorological data that were used in support of the COL application:

- Five years of formatted, ASCII text, sequential access hourly data pursuant to the guidance in Appendix A of Regulatory Guide 1.23, "Meteorological Monitoring Programs for Nuclear Power Plants," Revision 1. Six files are included for the periods March 1, 1994 - December 31, 1994, 1995, 1996, 1997, 1998, and January 1, 1999 - February 28, 1999.
- Five years of hourly data in ARCON model input format. Six files are included for the periods March 1, 1994 - December 31, 1994, 1995, 1996, 1997, 1998, and January 1, 1999 - February 28, 1999. These data were used in the prediction of control room diffusion estimates as described in FSAR Section 2.3.4.4.

P.O. Box 1551  
Raleigh, NC 27602

T> 919.546.4222  
F> 919.546.2405

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- Five years of hourly data in MACCS2 model input format. Five files are included for the years 2001 – 2005. These data were used in the severe accident analysis described in ER Section 7.2.5.

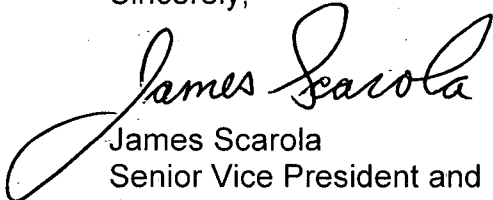
In a May 7, 2008 telephone call between Ms. Serita Sanders, NRC, and Mr. Bob Kitchen, PEC, NRC requested that the meteorological data be resubmitted in the Portable Document Format (PDF) to support NRC docketing of the information. The requested information is provided in the enclosure to this letter.

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

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

Executed on this 12th day of May, 2008.

Sincerely,



James Scarola  
Senior Vice President and  
Chief Nuclear Officer

Enclosure

cc (w/o Enclosure): 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  
Ms. Serita Sanders, Project Manager, Division of New Reactor  
Licensing