



PO Box 1551
411 Fayetteville Street Mall
Raleigh NC 27602

James Scarola
Sr. Vice President and Chief Nuclear Officer
Progress Energy, Inc.

Serial: NPD-NRC-2008-003
February 18, 2008

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

ATTN: R. William Borchardt, Director
Office of New Reactors

**Subject: Supplemental Meteorological Data in Support of Combined License
Application for Shearon Harris Nuclear Power Plant Units 2 and 3
NRC Project Number 738**

**Reference: Application for Combined License for Shearon Harris Nuclear Power Plant
Units 2 and 3**

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.

In addition to the contents of the application itself, PEC is also providing the enclosed supplemental information in support of the review of the HAR 2 and 3 COL application. The enclosed CD-ROM contains the following onsite meteorological data that was 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.

D084
NR0

- 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.

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



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

bc : Bill Johnson, Chairman and CEO
Joe Donahue, VP-NESD
Daniel Roderick, VP-Nuclear Projects & Construction
Garry Miller, General Manager-Nuclear Plant Development
Robert Kitchen, Manager-Nuclear Plant Licensing
Paul Fulford, Manager-PE&RAS
John O'Neill, Jr. (Pillsbury Winthrop Shaw Pittman, LLP)

File: NGG-NPD (Betsy Cox)