



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

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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. 008 RELATED TO
INFORMATION SYSTEMS IMPORTANT TO SAFETY**

Reference: Letter from Tanya Simms (NRC) to James Scarola (PEC), dated September 16, 2008, "Request for Additional Information Letter No. 008 Related to SRP Section 07.05 for the 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.

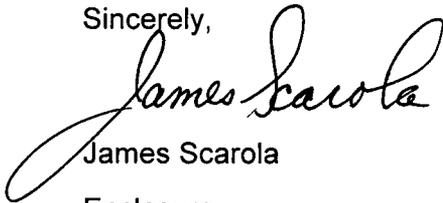
A response to the NRC request is addressed in the enclosure. The enclosure also identifies changes that will be made in a future revision of the Shearon Harris Nuclear Power Plant Units 2 and 3 application.

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

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

Executed on October 29, 2008.

Sincerely,



James Scarola

Enclosure

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

P.O. Box 1551
Raleigh, NC 27602

T > 919.546.4222
F > 919.546.2405

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NRO

**Shearon Harris Nuclear Power Plant Units 2 and 3
Response to NRC Request for Additional Information Letter No. 008 Related to
SRP Section 07.05 for the Combined License Application, dated September 16, 2008**

<u>NRC RAI #</u>	<u>Progress Energy RAI #</u>	<u>Progress Energy Response</u>
07.05-1	H-0044	Response enclosed – see following pages

NRC Letter No.: HAR-RAI-LTR-008

NRC Letter Date: September 16, 2008

NRC Review of Final Safety Analysis Report

NRC RAI #: 07.05-1

Text of NRC RAI:

Tables 7.5-1 and 7.5-8 of the AP1000 Design Control Document (DCD), Revision 16, Post-Accident Monitoring System, contain variables to monitor the meteorological parameters and environs radiation and radioactivity. These variables are defined as site specific. Define these variables in compliance with Regulatory Guide 1.97, Revision 3, as committed to in the combined license application, or justify an alternative approach.

Table 7.5-1 (Sheet 12 of 12) of the AP1000 DCD, Revision 16, identifies meteorological parameters as site specific. Additionally, Table 7.5-8 of the AP1000 DCD identifies "meteorology" and "boundary environs radiation and radioactivity" as site specific variables. However, the staff has not found where the combined license application addresses the parameters/variables. Explain where these variables are found.

PGN RAI ID #: H-0044

PGN Response to NRC RAI:

The meteorological parameters monitored are identified in FSAR Tables 2.3.3-201 and 2.3.3-202. The environs radiation and radioactivity monitoring complies with Regulatory Guide 1.97, Revision 3. This information will be incorporated into the FSAR in a future amendment via: (1) a site specific table that addresses both DCD Tables 7.5-1 and 7.5-8, and (2) the addition of appropriate instrument ranges to FSAR Table 2.3.3-202.

Associated HAR COL Application Revisions:

The following changes will be made to the HAR FSAR in a future amendment:

1. Revise FSAR Section 7.5 from:

"This section of the referenced DCD is incorporated by reference with no departures or supplements."

To read:

HAR SUP 7.5-1

"This section of the referenced DCD is incorporated by reference with the following departures and/or supplements."

2. Revise FSAR Section 7.5 to add Table 7.5-201. This table supplements DCD Table 7.5-1 and provides variable data shown in the DCD table as "site specific." (See new table below.)

HAR SUP 7.5-1

Table 7.5-201^(a)
Post-Accident Monitoring System

Variable	Range / Status	Number of Instruments Required	Remarks
Boundary environs radiation	Conforms to RG 1.97	NA	
Meteorological parameters	See Remarks	NA	See FSAR Subsection 2.3.3 and Tables 2.3.3-201, 2.3.3-202

a) This Table supplements DCD Tables 7.5-1 and 7.5-8 and provides the site specific information noted in "Remarks" column of DCD Table 7.5-1 and in the "Variable" column of DCD Table 7.5-8.

3. Revise FSAR Table 2.3.3-202 to add ranges for Wind Direction, Wind Speed, Ambient Temperature, Relative Humidity, and Barometric Pressure. (See revised table on next page.)

Attachments/Enclosures:

None

HAR COL 2.3-3

Table 2.3.3-202
HNP/HAR Meteorological Monitoring Tower
Accuracy of Monitored Parameters

Monitored Parameter	Basis	Accuracy Criteria
Wind Direction 0 – 360 degrees (12 & 61m)	NRC Regulatory Guide 1.23, Revision 1	±5 degrees (°). Starting threshold <0.45 meter per second (m/s) (1 mph). Resolution to 1.0°.
Wind Speed 0 – 90 mph (12 & 61m)	NRC Regulatory Guide 1.23, Revision 1	±0.2 m/s (±0.45 mph) or 5% of observed wind speed. Starting threshold <0.45 m/s (1 mph). Resolution to 0.1 m/s or 0.1 mph.
Ambient Temperature -4°F - 104°F (12 & 61m)	NRC Regulatory Guide 1.23, Revision 1	±0.5°C (±0.9°F). Resolution to 0.1°C (0.1°F).
Differential Temperature	NRC Regulatory Guide 1.23, Revision 1	±0.1°C (±0.18°F). Resolution to 0.01°C (0.01°F).
Wet-Bulb Temperature	NRC Regulatory Guide 1.23, Revision 1	±0.5°C (±0.9°F). Resolution to 0.1°C (0.1°F).
Relative Humidity/Dew Point 0 – 100%	NRC Regulatory Guide 1.23, Revision 1	Relative Humidity: ±4% Resolution to 0.1%. Dew Point: ±1.5°C (±2.7°F). Resolution to 0.1°C (0.1°F).
Total Precipitation	NRC Regulatory Guide 1.23, Revision 1	Precipitation (water equivalent). ±10% for a volume equivalent to 2.54 millimeter (mm) (0.1 in.) of precipitation at a rate <50 millimeters per hour (mm/h) (<2 inches per hour [in./h]). Resolution to 0.25 mm (0.01 in.)
Solar Radiation ^(a)	ANSI/ANS 2.5-1984	Consistent with current state- of-the-art.
Barometric Pressure ^(a) 26.06 – 32.58 "Hg	ANSI/ANS 2.5-1984	Consistent with current state- of-the-art
Datalogger Sampling Rate	NRC Regulatory Guide 1.23, Revision 1	At least once every 5 seconds
Time	NRC Regulatory Guide 1.23, Revision 1	±5 minutes (min.) Resolution to ±1 min.

a) There are no accuracies specified in RG 1.23 for these parameters. ANSI/ANS 2.5-1984 guidance reflects industry and regulator-accepted state-of-the-art specifications.