

Serial: NPD-NRC-2009-130

July 6, 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
SUPPLEMENT 1 TO RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION LETTER
NO. 016 RELATED TO PROBABILISTIC RISK ASSESSMENT AND SEVERE ACCIDENT
EVALUATION

References:

- 1. Letter from Ravindra G. Joshi (NRC) to James Scarola (PEC), dated September 24, 2008, "Request for Additional Information Letter No. 016 Related to SRP Section 19 for the Harris Units 2 and 3 Combined License Application"
- 2. Letter from James Scarola (PEC) to U. S. Nuclear Regulatory Commission, dated October 29, 2008, "Response to Request for Additional Information Letter No. 016 Related to Probabilistic Risk Assessment and Severe Accident Evaluation," Serial: NPD-NRC-2008-047

### Ladies and Gentlemen:

Progress Energy Carolinas, Inc. (PEC) hereby submits a supplemental response to the Nuclear Regulatory Commission's (NRC) request for additional information provided in the referenced letter. A revised response to the NRC request is addressed in the enclosure.

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 July 6, 2009.

Sincerely,

Garry D. Miller General Manager

**Nuclear Plant Development** 

Enclosure

cc: U.S. NRC Region II, Regional Administrator

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U.S. NRC Resident Inspector, SHNPP Unit 1

Mr. Brian Hughes, U.S. NRC Project Manager

Progress Energy Carolinas, Inc.

P.O. Box 1551 Raleigh, NC 27602 DOGY

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bc: John Elnitsky, VP-Nuclear Plant Development

Robert Kitchen, Manager-Nuclear Plant Licensing

Tillie Wilkins, NPD-Licensing

John O'Neill, Jr. (Pillsbury Winthrop Shaw Pittman, LLP)

A. K. Singh (Sargent & Lundy, LLC)
Cynthia Malecki (Sargent & Lundy, LLC)

Lorin Young (CH2M HILL)
John Archer (WorleyParsons)

NPD Document Control Inbox (Records: Correspondence)

File: NGG-NPD (Dawn Bisson)

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# Shearon Harris Nuclear Power Plant Units 2 and 3 Supplement 1 to Response to NRC Request for Additional Information Letter No. 016 Related to SRP Section 19 for the Combined License Application, dated September 24, 2008

NRC RAI#	Progress Energy RAI #	Progress Energy Response
19-1	H-0385	Revised response enclosed – see following pages
19-2	H-0084	NPD-NRC-2008-047; October 29, 2008

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NRC Letter No.: HAR-RAI-LTR-016

NRC Letter Date: September 24, 2008

NRC Review of Final Safety Analysis Report

NRC RAI #: 19-1

**Text of NRC RAI:** 

Part of AP1000 DCD COL Information Item 19.59.10-2 calls for the following action by COL applicants:

The Combined License applicant will confirm that the High Winds, Floods, and Other External Events analysis documented in Section 19.58 is applicable to the COL site. Further evaluation will be required if the COL site is shown to be outside of the bounds of the High Winds, Floods, and Other External Events analysis documented in Section 19.58.

The above requirement is replaced by the following words in STD COL 19.59.10-2:

It has been confirmed that the High Winds, Floods, and Other External Events analysis documented in Section 19.58 is applicable to the site...

Please provide supporting information or appropriate references that ensure that all of the key site-related assumptions in the Section 19.58 External Events analyses are valid for the Harris site.

#### **PGN RAI ID #:** H-0083

#### **PGN Response to NRC RAI:**

The external events of interest are described in Section 19.58, "Winds, Floods, and Other External Events," of the Combined Operating License (COL) which incorporates Section 19.58 of the Design Control Document (DCD) with no departure or supplement. The text of DCD Section 19.58 is updated by the AP1000 Standard COL Technical Report, APP-GW-GLR-101, which addresses the following external events for DCD Section 19.58.2, "External Events Analysis":

- 19.58.2.1 Severe Winds and Tornadoes
- 19.58.2.2 External Floods
- 19.58.2.3 Transportation and Nearby Facility Accidents
- 19.58.2.3.1 Aviation Accidents
- 19.58.2.3.2 Marine Accidents
- 19.58.2.3.3 Pipeline Accidents
- 19.58.2.3.4 Railroad and Truck Accidents

The Harris specific event frequencies for the above events are provided in Table 19.58-201 in the response to NRC RAI Letter 063, RAI Number 19-3 (H-0460). The original response is supplemented with a risk evaluation of potential aviation accidents (see Table 19.58-201 in the response to NRC RAI Letter 063, RAI Number 19-3).

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# Associated HAR COL Application Revisions:

The associated changes that will be made in a future revision to the HAR FSAR are described in the response to NRC RAI Letter 063, RAI Number 19-3 (H-0460).

## Attachments/Enclosures:

None.