



10 CFR 52 Appendix D, subsection X.B

Serial: NPD-NRC-2010-020

April 12, 2010

U.S. Nuclear Regulatory Commission

ATTN: Document Control Desk

Washington, D.C. 20555

**Subject: Shearon Harris Nuclear Power Plant Units 2 and 3
Docket Nos. 52-022 and 52-023
Submittal of COL Application, Revision 2**

Ladies and Gentlemen:

This letter provides Progress Energy Carolinas, Inc.'s (PEC) update to the Shearon Harris Nuclear Plant, Units 2 and 3, (HAR) combined license (COL) application submitted by PEC letter NPD-NRC-2009-070, dated April 17, 2009. This update includes the annual update of the docketed Final Safety Analysis Report (Part 2 of the HAR COL application) as required by 10 CFR Part 52, Appendix D, subsection X.B. Additionally, other parts (i.e., Parts 1, 3, 4, 5, 7, 9, 10, and 11) of the HAR COL application are also updated. Each revision to the HAR COL application is identified by revision bars in the margin for text and tables and by the revision number for figures.

This update includes changes identified by previous correspondence, including responses to requests for additional information submitted to the NRC from January 16, 2009 through January 6, 2010, voluntary and supplemental responses, changes to corporate officers, miscellaneous errata items, and standard and plant-specific changes necessary to reflect the incorporation by reference of the AP1000 generic DCD Revision 17.

The revisions to the HAR COL application also include changes to standard content incorporated into the updated reference COL application (R-COLA) for Bellefonte Units 3 and 4 and Vogtle Units 3 and 4, plus additional changes are drawn from R-COLA responses through early January 2010.

A document identifying each change, as well as its source or basis, is being prepared as an aid to the NRC reviewers and will be submitted by a separate letter by April 30, 2010.

The HAR COL application is composed of several parts. Each of these is identified below along with indication of any revision contained in this document update.

Part 1 - General and Financial Information (Revision 2 included).

Part 2 - Final Safety Analysis Report (FSAR) (Revision 2 included).

Part 3 - Environmental Report (Revision 2 included).

Part 4 - Technical Specifications (Revision 2 included).

Progress Energy Florida, Inc.

P.O. Box 14042

St. Petersburg, FL 33733

D084
NRO

Part 4 was originally submitted as a clean copy ready for issuance with the Combined License. This update includes change bars to show where the revisions have been made to support NRC review. A clean copy will be prepared once the review is completed on a schedule necessary to support the issuance of the Combined License.

Part 5 - Emergency Plan (Revision 2 included).

The state and local radiological emergency plans have been relocated from the HAR COL application Part 5, Emergency Planning, to HAR COL Part 9, Withheld Information, to be consistent with NRC staff practice to designate these plans as "Non-Publicly Available" in ADAMS. NRC designates these documents as "Sensitive-Federal, State, Foreign Government, and International Agency Controlled." The guidance to withhold these documents is located in NRC letter, William Reckley to Russell Bell (NEI) dated February 10, 2009.

Part 6 - [Not used. Reserved for applicants requesting Limited Work Authorization (LWA)].

Part 7 - Departures and Exemption Requests (Revision 2 included).

Part 8 - Safeguards/Security Plans (Cover Page Revision 1 included).

Cover page revision only to reflect Safeguard Security Plan submitted per separate letter from A.D. Barginere, NPD-Security to U.S. Nuclear Regulatory Commission Document Control Desk (Attn: Patricia K. Holahan) dated May 4, 2009.

Part 9 - Withheld Information (Revision 1 included).

Part 10 - Proposed License Conditions (Including ITAAC) (Revision 2 included).

Part 11 - Enclosures (Revision 2 included).

Certain portions of the new 10 CFR 73 rule package, such as cyber security, and 10 CFR 52.80(d) are not reflected in this update due to ongoing interactions with the NRC concerning guidance and standard information being developed in coordination with NEI. An update will be provided in the future to reflect responses to NRC RAIs and the associated revision to the corresponding documents.

PEC is evaluating a potential schedule change for plant construction and operation. No decision has been made to alter the schedule at this time, and therefore there is no change to the COL application. If such a change to the HAR schedule is determined, PEC will advise the NRC by separate correspondence.

This HAR COL application update contains no restricted data or national defense information requiring separation in accordance with 10 CFR 50.33. Part 9 of the application contains certain financial information that PEC requested the NRC to withhold from public disclosure in accordance with the requirements of 10 CFR 2.390 in the original application. In support of this request for continuing proprietary treatment of the information in Part 9, PEC is enclosing a copy of the original affidavit that was submitted when the information was initially provided. Part 9

also contains state and local radiological emergency plans designated as "Sensitive-Federal, State, Foreign Government, and International Agency Controlled," as requested by the NRC. Finally Part 9 contains Part 2 Chapter 12 Figure 12.4-201, entitled Depiction of HNP Area TLD Locations, that PEC requests the NRC to withhold from public disclosure as Security Related Information per the requirements of 10 CFR 2.390.

Consistent with common licensing practice and the original HAR COL application, most of the updated application text is written in the present tense, active voice, including discussions of facilities and programs not yet built or implemented. Exceptions to this approach are the discussions of operating experience and completed studies and evaluations, which are written in the past tense. It should be understood, however, that statements regarding facilities (e.g., structures, systems and components) and pre-construction, pre-operational, and operational activities (e.g., procedures and programs) typically address activities that have not yet been performed and will not be performed until it is reasonable and appropriate to do so.

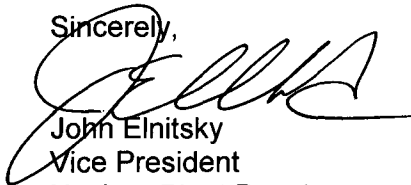
A complete set of the HAR COL application documents (by Part as identified above) is provided in electronic file format on the enclosed disk (Enclosure 2). Enclosure 2 contains the non-public version revised HAR COL application. Appropriate pre-submission checks have been successfully performed on the files to confirm compliance with the guidelines provided on the NRC web site, which have been found acceptable for electronic submittal. A pre-flight report for Enclosure 2 is provided as Enclosure 3. The disk includes a "packing slip" describing its contents, pursuant to NRC instructions for electronic filing.

If you have any questions, or need additional information, please contact me at (727) 820-4481 or Bob Kitchen at (919) 546-6992.

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

Executed on this 12th day of April, 2010.

Sincerely,



John Elnitsky
Vice President
Nuclear Plant Development

- Enclosures:
1. Affidavit from PEC letter NPD-NRC-2008-001, dated February 18, 2008
 2. Shearon Harris Nuclear Power Plant, Units 2 and 3, COL Application, Revision 2, Non - Public Version, (electronic submittal)
 3. Shearon Harris Nuclear Power Plant, Units 2 and 3, COL Application, Revision 2, Non - Public Version, Pre-flight Report

cc : U.S. NRC Region II, Regional Administrator (w/o Enclosure 2)
U.S. NRC Resident Inspector, SNHPP Unit 1 (w/o Enclosure 2)
Mr. Brian Hughes, U.S. NRC Project Manager (w/o Enclosure 2)
Dr. Don Palmrose, U. S. NRC Environmental Project Manager (w/o Enclosure 2)

Enclosure 1 to Serial: NPD-NRC-2010-020
Page 1 of 3

Enclosure 1 to Serial: NPD-NRC-2010-020

Affidavit from February 18, 2008 Letter, 3 pages including this cover page

AFFIDAVIT OF JAMES SCAROLA

STATE OF NORTH CAROLINA)

) ss

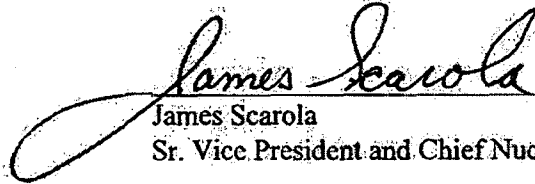
COUNTY OF WAKE)

I, James Scarola, Senior Vice President & Chief Nuclear Officer, Progress Energy Carolinas, Inc., do hereby affirm and state:

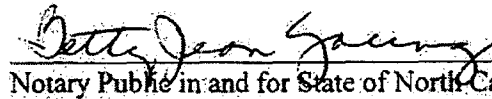
1. I am authorized to execute this affidavit on behalf of Progress Energy Carolinas, Inc., (hereinafter referred to as "PEC"). I am further authorized to review information submitted to the Nuclear Regulatory Commission ("NRC") and apply for the withholding of information from disclosure. I am making this affidavit in conformance with the provisions of the NRC's regulations at 10 CFR 2.390 and in support of PEC's request for proprietary treatment of certain financial information.
2. I have knowledge of the criteria used by PEC in designating information as sensitive, proprietary, or confidential.
3. Pursuant to the provision of paragraph (a)(4) of 10 CFR 2.390, the following is furnished for consideration by the NRC in determining whether the information sought to be withheld from public disclosure should be withheld.
 - a. The information sought to be withheld from public disclosure is owned by PEC and has been held in confidence by PEC.
 - b. The information sought to be protected is not available to the public to the best of our knowledge and belief.
 - c. The information is of the type that would customarily be held in confidence by PEC. This financial information consists of PEC's projection for construction, fuel supply, and operating costs. Public disclosure of this information is likely to cause harm to PEC because it would allow contractors, vendors, and competitors to understand PEC's competitive position and schedule prior to securing the related contracts and services or pricing competitive services.

- d. The proprietary information sought to be withheld from public disclosure is identified in Part 9 of the COL application and is marked as proprietary as it appears in the application.
- e. The information is transmitted to the NRC in confidence and under the provisions of 10 CFR 2.390; it is to be received in confidence by the NRC.

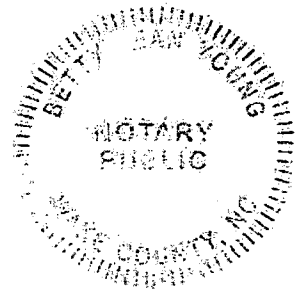
James Scarola, being dully sworn, states that he is Sr. Vice President and Chief Nuclear Officer, Progress Energy Carolinas, Inc., that he is authorized on the part of said Company to sign and file with the U. S. Nuclear Regulatory Commission this combined license application for the Shearon Harris Nuclear Power Plant Units 2 and 3, and that all the matter and facts set forth herein are true and correct to the best of his knowledge.


James Scarola
Sr. Vice President and Chief Nuclear Officer

Subscribed and sworn to before me, a Notary Public, in and for the county and state above named, this 18th day of February, 2008.


Notary Public in and for State of North Carolina

My Commission Expires: October 5, 2008



Enclosure 3 to Serial: NPD-NRC-2010-020

Page 1 of 4

Enclosure 3 to Serial: NPD-NRC-2010-020

Shearon Harris Nuclear Power Plant, Units 2 and 3 COL Application, Revision 2, Non-Public
Version, (electronic submittal) Pre-flight Report

This document serves as a pre-flight report for the Harris COLA Revision 2 Submittal 6. The following files do not pass pre-flight or do not meet NRC criteria, but text is word searchable and clarity/legibility is of high quality.

No.	File Name	Preflight Status	Reason
Part 1 – General and Financial Information			
1	HAR_Part01_General_and_Financial Information.pdf	Error/Failed	< 300 ppi (4 pages due to company logos on the financial reports)
Part 2 - Final Safety Analysis Report			
1	HAR_FSAR_APP02_BB.pdf	Error/Failed	< 300 ppi (due to company logos on each page)
Part 3 – Environmental Report			
1	HAR_ER_APP02_04_01.pdf	Error/Failed	File larger than 50 MB to have 300 ppi resolution
Part 4 – Technical Specifications			
1	HAR_Part04_Technical_Specifications.pdf	Error/Failed	< 300 ppi for two figures
Part 5 - Emergency Plan			
1	HAR_EP_FIG_Intro-3.pdf	Error/Failed	< 300 ppi
2	HAR_EP_FIG_Intro-4.pdf	Error/Failed	< 300 ppi
3	HAR_EP_FIG_Intro-6.pdf	Error/Failed	< 300 ppi
4	HAR_EP_FIG_J-1.pdf	Error/Failed	< 300 ppi
5	Apex_Fire_Dept.pdf	Error/Failed	< 300 ppi; font not embedded (due to signatures)
6	Apex_Rescue_Squad.pdf	Error/Failed	< 300 ppi; font not embedded (due to signatures)
7	Charul_G._Haugan_MD.pdf	Error/Failed	< 300 ppi; font not embedded (due to signatures)

No.	File Name	Preflight Status	Reason
8	Chatham_Co.pdf	Error/Failed	< 300 ppi; font not embedded (due to signatures)
9	Douglas_I_Hammer_MD.pdf	Error/Failed	< 300 ppi; font not embedded (due to signatures)
10	Harnett_Co.pdf	Error/Failed	< 300 ppi; font not embedded (due to signatures)
11	Lee_Co.pdf	Error/Failed	< 300 ppi; font not embedded (due to signatures)
12	NC_Division_of_Emergency_Mgt.pdf	Error/Failed	< 300 ppi; font not embedded (due to signatures)
13	Rex_Healthcare.pdf	Error/Failed	< 300 ppi; font not embedded (due to signatures)
14	Town_of_Holly_Springs.pdf	Error/Failed	< 300 ppi; font not embedded (due to signatures)
15	Wake_Co_Emergency_Mgt.pdf	Error/Failed	< 300 ppi; font not embedded (due to signatures)
16	WakeMed_Cary.pdf	Error/Failed	< 300 ppi; font not embedded (due to signatures)
17	WakeMed_Raleigh.pdf	Error/Failed	< 300 ppi; font not embedded (due to signatures)
18	010 - 50.54.q_Evaluation.pdf	Error/Failed	< 300 ppi; font not embedded due to making signature pages searchable (2 pages)
19	013 – HAR_EP_SUPP_UNIT_1_EAL_BASIS_DOC.pdf	Error/Failed	< 300 ppi
20	014_HAR_EP_SUPP_UNITS_2_and_3_EAL_BASIS_DOC.pdf	Error/Failed	< 300 ppi
Part 9 – SUNSI Information			
1	HAR_FSAR_FIG12_04_201.pdf	Error/Failed	< 300 ppi
2	00 Plan Cover – Rev 1, Ch 1.pdf	Error/Failed	< 300 ppi

No.	File Name	Preflight Status	Reason
3	02 MUTUAL SUPPORT AGREEMENT – Rev 1.pdf	Error/Failed	< 300 ppi
4	04 STATE of NORTH CAROLINA PLAN – Rev 1, Ch 1.pdf	Error/Failed	< 300 ppi
5	13 Annex-G Appendix 1 _Cape Fear Marine_ - Rev 1.pdf	Error/Failed	< 300 ppi
6	14 Annex-G Appendix 2 _Jordan and Harris Lake_ - Rev 1, Ch 1.pdf	Error/Failed	< 300 ppi
7	16 Annex-G Appendix 4 _Lake Wyley and Catawba River_ - Rev 1.pdf	Error/Failed	< 300 ppi
8	Chatham County Plan, Rev 1, Ch 1.pdf	Error/Failed	< 300 ppi
9	Harnett County Plan, Rev 1, Ch 1.pdf	Error/Failed	< 300 ppi
10	Lee County Plan Rev 1, Ch 1.pdf	Error/Failed	< 300 ppi
11	Wake County Plan, Rev 1, Ch 1.pdf	Error/Failed	< 300 ppi
Part 11 – Reference Info			
1	HAR_Part11_QAPD.pdf	Error/Failed	Resolution of bitmap < 300 ppi (9 pages), font not embedded due to making signature page searchable (1 page)