



10 CFR 52 Appendix D, subsection X.B

Serial: NPD-NRC-2012-007
April 12, 2012

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 4**

Ladies and Gentlemen:

This letter provides Progress Energy Carolinas, Inc.'s (PEC) update to the Shearon Harris Nuclear Power Plant, Units 2 and 3, (HAR) combined license (COL) application submitted by PEC letter NPD-NRC-2011-028, dated April 14, 2011. 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, 7, 8, 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, voluntary and supplemental responses submitted to the NRC through January 2012, and miscellaneous errata items. This application revision also includes changes identified as standard by the R-COL applicant in responses to requests for additional information (RAIs), Safety Evaluation Report Open Items (OIs) and other voluntary submittals through June 22, 2011, with the exception of the R-COLA voluntary submittal regarding seismic margin (ND-10-1811) which is planned for inclusion in a future HAR COLA revision.

This application revision incorporates by reference Appendix D to 10 CFR Part 52 and the Westinghouse Electric Company's (Westinghouse's) AP1000 Design Control Document (DCD) Revision 19 (submitted June 2011).

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 via a separate letter by April 30, 2012.

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 4 included).

Part 1 is revised to identify that the scope of the application includes 10 CFR Parts 30, 40 and 70 licenses, and miscellaneous errata. Financial information withheld as proprietary is submitted in Part 9.

Progress Energy Florida, Inc.
P.O. Box 14042
St. Petersburg, FL 33733

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Part 2 - Final Safety Analysis Report (FSAR) (Revision 4 included).

Part 2 is revised as described above to incorporate HAR-specific and R-COLA standard responses to NRC RAIs, OIs, voluntary submittals, miscellaneous errata, and conforming changes to reflect the incorporation by reference of Westinghouse AP1000 DCD information.

Part 3 - Environmental Report (Revision 4 included).

Part 3 is revised to incorporate responses to site-specific RAIs, changes to the general arrangement and grading/drainage of the site to reflect permitting considerations, and miscellaneous errata.

Part 4 - Technical Specifications (Revision 4 included).

Revised to incorporate changes to conform with Generic Technical Specifications for the AP1000 contained in DCD Revisions 18 and 19.

Part 5 - Emergency Plan (Revision 3, previously submitted).

Part 6 - Not used; reserved for applicants requesting Limited Work Authorization (LWA).

Part 7 - Departures and Exemption Requests (Revision 4).

Part 7 is revised to include an editorial change.

Part 8 - Safeguards/Security Plans (Revision 3, material previously submitted on March 19, 2012 (Physical Security Plan, Revision 3) and July 1, 2011 (Special Nuclear Material Physical Protection Program Description, Revision 0)).

Part 9 - Withheld Information (Revision 4 included).

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 (Enclosure 1). 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. In addition, Part 9 is revised to include a revised plan related to cyber security regulations.

Part 10 - Proposed License Conditions (including ITAAC) (Revision 4 included).

Part 10 is revised to incorporate R-COLA standard RAI responses and voluntary submittals, and miscellaneous errata.

Part 11 - Enclosures (Revision 4 included).

Part 11 is revised to submit a New Fuel Shipping Plan and information in support of the Special Nuclear Material license application. Part 11 is also revised to reflect updates to the Quality Assurance Program Description and the Cyber Security Plan.

This HAR COL application update contains no restricted data or national defense information requiring separation in accordance with 10 CFR 50.33.

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 set of the revised 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, and they 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.

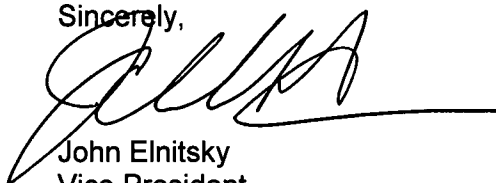
The applicant for this COL is PEC, as identified in Part 1 of the HAR COL application. The ultimate corporate parent of PEC is Progress Energy, Inc. Progress Energy, Inc. is in the process of a merger with Duke Energy, Inc.; this merger is expected to close July 1, 2012, pending completion of a review by the responsible State and Federal agencies. PEC will remain the COL holder for HAR after the merger, and will amend the HAR COL application to reflect the new ultimate holding company arrangement (as described in Progress Energy letters dated March 30, 2011 and September 2, 2011) in a future HAR COLA revision after conclusion of the merger.

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

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

Executed on April 12, 2012.

Sincerely,

A handwritten signature in black ink, appearing to read 'John Elnitsky', with a long horizontal flourish extending to the right.

John Elnitsky
Vice President
New Generation Programs & Projects

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 4, Non - Public Version (electronic submittal – 1 DVD enclosed)
 3. Shearon Harris Nuclear Power Plant, Units 2 and 3, COL Application,
 Revision 4, Non - Public Version, Pre-flight Report

cc : U.S. NRC Region II, Regional Administrator (w/o Enclosure 2)
 U.S. NRC Resident Inspector, SHNPP Unit 1 (w/o Enclosure 2)
 Mr. Brian Hughes, U.S. NRC Project Manager (w/o Enclosure 2)
 Ms. Mallecia Sutton, U.S. NRC Environmental Project Manager (w/o Enclosure 2)

Enclosure 1 to Serial: NPD-NRC-2012-007

Affidavit from February 18, 2008 Letter

(2 pages following this cover page)

AFFIDAVIT OF JAMES SCAROLA

STATE OF NORTH CAROLINA)

) ss

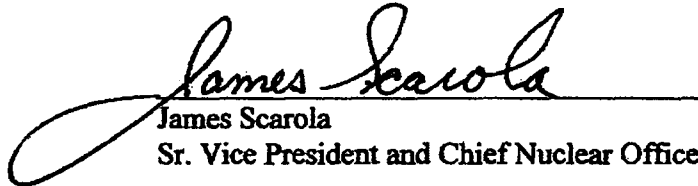
COUNTY OF WAKE)

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

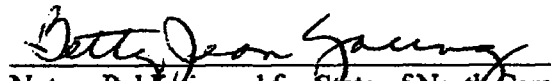
1. I am authorized to execute this affidavit on behalf of Progress Energy Carolinas, Inc., (hereinafter referred to as "PEC"). I am further authorized to review information submitted to the Nuclear Regulatory Commission ("NRC") and apply for the withholding of information from disclosure. I am making 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.

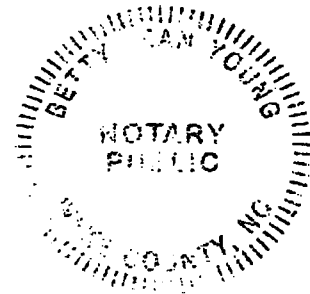
James Scarola, being dully sworn, states that he is Sr. Vice President and Chief Nuclear Officer, Progress Energy Carolinas, Inc., that he is authorized on the part of said Company to sign and file with the U. S. Nuclear Regulatory Commission this combined license application for the Shearon Harris Nuclear 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-2012-007

Shearon Harris Nuclear Power Plant, Units 2 and 3 COL Application, Revision 4, Non-Public
Version, (electronic submittal) Submission 8 Pre-flight Report

PROGRESS ENERGY HAR COLA SUBMITTAL 8 PRE-FLIGHT REPORT

This document serves as a pre-flight report for the Harris COLA Revision 4 Submittal 8. The following files (mostly individual figure files) do not pass pre-flight, but text is word searchable and clarity/legibility is of high quality. No files were scanned, except for Part 11.

No.	File Name	Preflight Status	Reason
Part 2 - Final Safety Analysis Report			
1	HAR_FSAR_APP02_BB.pdf	Error/Failed	< 300 ppi (due to company logos on each page)
2	HAR_FSAR_FIG02_04_03_243.pdf	Error/Failed	File larger than 50 MB
3	HAR_FSAR_FIG12_04_201.pdf	Error/Failed	< 300 ppi
Part 3 – Environmental Report			
1	HAR_ER_APP02_04_01.pdf	Error/Failed	File larger than 50 MB
Part 4 – Technical Specifications			
1	HAR_Part04_Technical_Specifications.pdf	Error/Failed	< 300 ppi for four figures
Part 9 – SUNSI Information			
1	00 Plan Cover – Rev 1, Ch 1.pdf	Error/Failed	< 300 ppi
2	01 Plan Introduction – Rev 1, Ch 1.pdf	Error/Failed	< 300 ppi
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	< 300 ppi, font not embedded due to OCR