



10 CFR 52 Appendix D, subsection X.B

Serial: NPD-NRC-2013-012  
April 15, 2013

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

**Subject: Shearon Harris Nuclear Power Plant Units 2 and 3  
Docket Nos. 52-022 and 52-023  
Submittal of COL Application, Revision 5**

Ladies and Gentlemen:

This letter provides Progress Energy Carolina, Inc.'s (PEC) revision to the Shearon Harris Nuclear Power Plant, Units 2 and 3, (HAR) combined license (COL) application submitted by PEC letter NPD-NRC-2012-007, dated April 12, 2012. This revision 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, 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 revision includes changes identified by previous correspondence, including responses to requests for additional information (RAI) and voluntary responses submitted to the NRC through February 28, 2013, changes resulting from the merger between Progress Energy, Inc. (PGN) and Duke Energy Corporation (DEC), additional organizational changes through February 28, 2013, and miscellaneous editorial items.

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

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, 2013.

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 5 included).**

Part 1 is revised to update the description of corporate structure, board of directors, corporate officers, and corporate financial information due to merger of PGN and DEC, as well as to provide updated construction cost information. This information reflects the status of the company as of February 28, 2013, unless otherwise noted. Financial information withheld as proprietary is submitted in Part 9.

Progress Energy Carolinas, Inc.  
P.O. Box 1551  
Raleigh, NC 27602

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Part 2 - Final Safety Analysis Report (FSAR) (Revision 5 included).

Part 2 is revised to incorporate merger-related corporate structure and organization changes, revised schedule for HAR 2 and 3 in-service dates, RAI and voluntary submittals, and miscellaneous editorial items. This information reflects corporate structure and organization changes through February 28, 2013.

Part 3 - Environmental Report (Revision 5 included).

Part 3 is revised to reflect the merger and incorporate miscellaneous editorial items.

Part 4 - Technical Specifications (Revision 5 included).

Part 4 is revised to reflect merger-related title changes and incorporate miscellaneous editorial items.

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, previously submitted).

Part 8 - Safeguards/Security Plans (Revision 3, previously submitted).

Part 9 - Withheld Information (Revision 5 included).

Part 9 of the application contains certain financial information that PEC requests the NRC to withhold from public disclosure in accordance with the requirements of 10 CFR 2.390. In support of this request for proprietary treatment of the information in Part 9, an affidavit is provided in 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 NRC. Part 9 is revised to provide updated corporate financial information due to the merger of PGN and DEC and also updated construction cost information.

Part 10 - Proposed License Conditions (including ITAAC) (Revision 5 included).

Part 10 is revised to incorporate RAI responses.

Part 11 - Enclosures (Revision 5 included).

Part 11 is revised to submit a new QAPD which reflects merger-related corporate organization changes, is applicable to all three DEC COL applications, and is based on NEI 06-14A revision 7 dated August 2010. The Special Nuclear Material (SNM) Material Control and Accounting Program Description is also revised to reflect merger-related changes.

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.

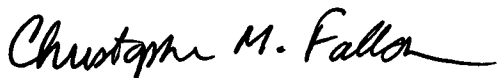
The applicant for this COL is PEC, as identified in Part 1 of the HAR COL application. The ultimate corporate parent of PEC is Duke Energy Corporation, as a result of a merger between Progress Energy, Inc. and Duke Energy Corporation which became effective July 2, 2012.

If you have any questions, or need additional information, please contact Bob Kitchen at (704) 382-4046, or me at (704) 382-9248.

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

Executed on April 15, 2013.

Sincerely,



Christopher M. Fallon  
Vice President  
Nuclear Development

- Enclosures:
1. Affidavit of Christopher M. Fallon
  2. Shearon Harris Nuclear Power Plant, Units 2 and 3, COL Application, Revision 5, Non - Public Version (electronic submittal – 1 disk enclosed)
  3. Shearon Harris Nuclear Power Plant, Units 2 and 3, COL Application, Revision 5, 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)

bc (w/o Enclosure 2):

Chris Fallon, VP- Nuclear Development  
Robert Kitchen, Director - Nuclear Development Licensing  
John Thrasher, Director - Nuclear Development Engineering  
Tillie Wilkins, ND-Licensing  
Kate Nolan, General Counsel-Nuclear  
John O'Neill, Jr. (Pillsbury Winthrop Shaw Pittman, LLP)  
A. K. Singh (Sargent & Lundy, LLC)  
Tanya Flowers (Sargent & Lundy, LLC)  
Lorin Young (CH2M HILL)  
John Archer (WorleyParsons)

bc: ND Document Inbox (File & Records)

Enclosure 1 to Serial: NPD-NRC-2013-012

Affidavit of Christopher M. Fallon, 2 pages

**AFFIDAVIT OF CHRISTOPHER M. FALLON**

STATE OF NORTH CAROLINA )

COUNTY OF MECKLENBURG ) ss  
)

I, Christopher M. Fallon, Vice President of Nuclear Development, Duke Energy Corporation, 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 financing plan. 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.

Christopher M. Fallon, being duly sworn, states that he is Vice President of Nuclear Development, Duke Energy Corporation, 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.

Christopher M. Fallon

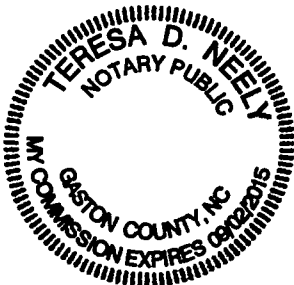
Christopher M. Fallon  
Vice President  
Nuclear Development

Subscribed and sworn to before me, a Notary Public, in and for the county and state above named, this 15<sup>th</sup> day of April 2013.

Teresa D. Neely

Notary Public in and for the State of North Carolina

My Commission Expires: 9/2/13



Enclosure 3 to Serial: NPD-NRC-2013-012

Shearon Harris Nuclear Power Plant, Units 2 and 3 COL Application, Revision 5,  
Non-Public Version, (electronic submittal) Submission 9 Pre-flight Report



This document serves as a pre-flight report for the Harris COLA Revision 5 Submittal 9. 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
<b>Part 2 - Final Safety Analysis Report</b>			
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
<b>Part 3 – Environmental Report</b>			
1	HAR_ER_APP02_04_01.pdf	Error/Failed	File larger than 50 MB
<b>Part 4 – Technical Specifications</b>			
1	HAR_Part04_Technical_Specifications.pdf	Error/Failed	< 300 ppi for four figures
<b>Part 9 – SUNSI Information</b>			
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
<b>Part 11 – Reference Info</b>			
1	HAR_Part11_QAPD.pdf	Error/Failed	< 300 ppi, font not embedded due to OCR