

June 14, 2010

Mr. John Elnitsky
Vice President, Nuclear Plant Development
Progress Energy Carolinas, Inc.
P.O. Box 14042
Saint Petersburg, FL 33733

SUBJECT: SUPPLEMENTAL REQUEST FOR ADDITIONAL INFORMATION
CONCERNING ANALYSIS OF EMISSIONS TO SUPPORT GENERAL
CONFORMITY FOR THE SHEARON HARRIS NUCLEAR POWER PLANT,
UNITS 2 AND 3, COMBINED LICENSES APPLICATION

Dear Mr. Elnitsky,

This letter transmits to Progress Energy Carolinas, Inc. (PEC), a supplemental request for additional information (RAI) needed to support a general conformity determination the U. S. Nuclear Regulatory Commission (NRC) staff must perform under Title 40 of the Code of Federal Regulations (40 CFR) Section 93.150 et seq. for the Shearon Harris Nuclear Power Plant (HAR), Units 2 and 3 combined licenses (COL) application.

Based on prior responses to NRC RAIs (NRC Agencywide Documents Access Management System [ADAMS] accession numbers ML090750402 and ML091330563), the NRC has established that a conformity determination under 40 CFR 93.150 et seq. is applicable with regard to the proposed building of HAR Units 2 and 3. Namely, the total of direct and indirect emissions of the criteria pollutant or precursor in a maintenance area caused by a Federal action would equal or exceed any of the rates in paragraphs (b)(2) of 40 CFR 93.153.

In a supplemental response to RAI 2.7-2 dated July 6, 2009, PEC provided the NRC with an analysis of emissions during all plant construction activities (ADAMS accession number ML091950669). This analysis was also provided to the North Carolina Department of the Environment and Natural Resources' Division of Air Quality (DAQ). The analysis included the total construction-related emissions (tons/day) for carbon monoxide, volatile organic compounds, and nitrogen oxide for the overall construction period of 2011 through 2017.

In a letter to the NRC dated March 5, 2010 (ADAMS accession number ML100710419), PEC gave notice that the prior projected in-service dates and the scheduling of pre-construction work is undergoing revision and is not expected to be provided to the NRC until the release of the next annual Integrated Resource Plan to the State of North Carolina Public Utilities Commission. The next Integrated Resource Plan is expected to be issued to the Public Utilities Commission in September 2010.

On April 5, 2010, the Environmental Protection Agency (EPA) issued a final rule revising the general conformity regulations that will become effective on July 6, 2010 (75 FR 17254). As presented in this final rule, affected Federal agencies must demonstrate conformity by meeting one or more of six methods specified in the regulation. One method available to Federal agencies for demonstrating conformity is to obtain a written commitment from the State to revise the state implementation plan (SIP) to include the emissions from the action.

Based on NRC staff discussions with DAQ, the DAQ plans to revise the SIP based on discussions with other air quality stakeholders for the airshed where the Shearon Harris site is located. The DAQ could submit a revision to the SIP to the EPA for approval sometime during the fourth quarter of calendar year 2010.

Therefore, based on this information, including the revised projected in-service dates for HAR Units 2 and 3 and EPA's revisions to the general conformity regulations, the NRC requests PEC provide the following:

An updated analysis of emissions previously submitted to the NRC (ADAMS accession number ML091950669) for each appropriate class of Clean Air Act criteria pollutants for the years of building the HAR Units 2 and 3 in support of the revised projected in-service dates. The response to the supplemental RAI should also clearly present:

- The basis for the analysis and quantity of the emissions released in tons/yr and tons/day.
- A statement indicating which of the six methods for demonstrating conformity the analysis would support and how the analysis supports that method. For example, two methods that may be applicable are:
 - PEC could update the analysis and use it in discussions with DAQ to have all building-related emissions (whether the emissions are related to NRC, U.S. Army Corps of Engineers (USACE)¹, or State regulated activities) be included in a revision of the SIP. The State of North Carolina could then make a written commitment to EPA to revise the SIP to include the emissions. If this method is pursued, the NRC requests a time table be provided indicating how PEC will work with the DAQ to complete this method.
 - The updated analysis could provide a breakdown of the emissions by their corresponding regulatory basis. For example, separating the emissions due to solely NRC-regulated activities from the other emissions. PEC would then commit to fully offset for these NRC-regulated activity emissions during the time frame of building HAR Units 2 and 3. The NRC would include this commitment for mitigation as a licensing condition if the HAR Units 2 and 3 COL application is approved. Note that if this method of determining conformity is selected, the analysis may need to also separate the emissions from other Federally-regulated activities (e.g., for the USACE to support its general conformity determination).

¹ The USACE is a cooperating agency with the NRC for the development of an environmental impact statement for the HAR Units 2 and 3 COL application and, therefore, is a member of the environmental review team responsible for developing the environmental impact statement.

J. Elnitsky

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As with the previous RAls, the NRC assumes that technically correct and complete responses will be received within 30 days of receipt of the supplemental RAI. For any information that cannot be provided in 30 days it is expected a date for receipt of this information will be provided to the NRC within the 30 day period so the NRC staff can assess the allocation of resources.

Should you have any questions or need additional clarification, I can be reached at 301-415- 3803, or via email to Donald.Palmrose@nrc.gov.

Sincerely,

/RA Robert Schaaf for/

Donald Palmrose, PhD
Senior Project Manager
Environmental Projects Branch 3
Division of Site and Environmental Reviews
Office of New Reactors

Docket Nos.: 52-022 and 52-023

cc: See next page

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ADAMS Accession No.: ML101470179

NRO-002

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