

August 22, 2007

Mr. James Scarola, Vice President  
Brunswick Steam Electric Plant  
Carolina Power & Light Company  
Post Office Box 10429  
Southport, North Carolina 28461

SUBJECT: BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2 - NOTICE OF  
CONSIDERATION OF ISSUANCE OF AMENDMENT TO FACILITY  
OPERATING LICENSE, PROPOSED NO SIGNIFICANT HAZARDS  
CONSIDERATION DETERMINATION, AND OPPORTUNITY FOR A HEARING  
(TAC NOS. MD4061 AND MD4062)

Dear Mr. Scarola:

Enclosed is a copy of a "Notice of Consideration of Issuance of Amendment to Facility Operating License, Proposed No Significant Hazards Consideration Determination, and Opportunity For a Hearing" related to the application for an amendment dated January 22, 2007, for the Brunswick Steam Electric Plant, Unit Nos. 1 and 2. The application proposes to change the Technical Specifications related to the fuel design description and the fuel criticality methods to accommodate the transition to AREVA fuel.

The notice has been forwarded to the Office of the Federal Register for publication.

Sincerely,

*/RA/*

Stewart N. Bailey, Senior Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-325 and 50-324

Enclosure: As stated

cc w/encl: See next page

Carolina Power & Light Company

cc:

David T. Conley  
Associate General Counsel II -  
Legal Department  
Progress Energy Service Company, LLC  
Post Office Box 1551  
Raleigh, North Carolina 27602-1551

Mr. David R. Sandifer, Chairperson  
Brunswick County Board of Commissioners  
Post Office Box 249  
Bolivia, North Carolina 28422

Resident Inspector  
U. S. Nuclear Regulatory Commission  
8470 River Road  
Southport, North Carolina 28461

Mr. John H. O'Neill, Jr.  
Pillsbury Winthrop Shaw Pittman, LLP  
2300 N Street NW.  
Washington, DC 20037-1128

Ms. Beverly Hall, Section Chief  
Division of Radiation Protection  
N.C. Department of Environment  
and Natural Resources  
3825 Barrett Dr.  
Raleigh, North Carolina 27609-7721

Mr. Terry D. Hobbs  
Plant General Manager  
Brunswick Steam Electric Plant  
Carolina Power & Light Company  
Post Office Box 10429  
Southport, North Carolina 28461-0429

Public Service Commission  
State of South Carolina  
Post Office Drawer 11649  
Columbia, South Carolina 29211

Brunswick Steam Electric Plant  
Units 1 and 2

Ms. Margaret A. Force  
Assistant Attorney General  
State of North Carolina  
Post Office Box 629  
Raleigh, North Carolina 27602

Mr. Robert P. Gruber  
Executive Director  
Public Staff - NCUC  
4326 Mail Service Center  
Raleigh, North Carolina 27699-4326

Ben Waldrep  
Director, Site Operations  
Brunswick Steam Electric Plant  
Carolina Power & Light Company  
Post Office Box 10429  
Southport, North Carolina 28461-0429

Mr. Norman R. Holden, Mayor  
City of Southport  
201 East Moore Street  
Southport, North Carolina 28461

Mr. Warren Lee  
Emergency Management Director  
New Hanover County Department of  
Emergency Management  
Post Office Box 1525  
Wilmington, North Carolina 28402-1525

Mr. J. Paul Fulford  
Manager, Performance Evaluation and  
Regulatory Affairs PEB5  
Carolina Power & Light Company  
Post Office Box 1551  
Raleigh, North Carolina 27602-1551

August 22, 2007

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Brunswick Steam Electric Plant  
Carolina Power & Light Company  
Post Office Box 10429  
Southport, North Carolina 28461

SUBJECT: BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2 - NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE, PROPOSED NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION, AND OPPORTUNITY FOR A HEARING (TAC NOS. MD4061 AND MD4062)

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Enclosed is a copy of a "Notice of Consideration of Issuance of Amendment to Facility Operating License, Proposed No Significant Hazards Consideration Determination, and Opportunity For a Hearing" related to the application for an amendment dated January 22, 2007, for the Brunswick Steam Electric Plant, Unit Nos. 1 and 2. The application proposes to change the Technical Specifications related to the fuel design description and the fuel criticality methods to accommodate the transition to AREVA fuel.

The notice has been forwarded to the Office of the Federal Register for publication.

Sincerely,

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Stewart N. Bailey, Senior Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-325 and 50-324

Enclosure: As stated

cc w/encl: See next page

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UNITED STATES NUCLEAR REGULATORY COMMISSION

CAROLINA POWER & LIGHT COMPANY

DOCKET NOS. 50-324 AND 50-325

NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO  
FACILITY OPERATING LICENSE, PROPOSED NO SIGNIFICANT HAZARDS  
CONSIDERATION DETERMINATION, AND OPPORTUNITY FOR A HEARING

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License Nos. DPR-71 and DPR-62 issued to the Carolina Power & Light Company (the licensee) for operation of the Brunswick Steam Electric Plant, Unit Nos. 1 and 2, located in Brunswick County, North Carolina.

The proposed amendment would change the Technical Specifications related to the fuel design description and the fuel criticality methods to accommodate the transition to AREVA fuel.

Before issuance of the proposed license amendment, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations.

The Commission has made a proposed determination that the amendment request involves no significant hazards consideration. Under the Commission's regulations in Title 10 of the CODE OF FEDERAL REGULATIONS (10 CFR), Section 50.92, this means that operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or

(3) involve a significant reduction in a margin of safety. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No

The proposed amendments revise the fuel bundle description contained in Technical Specification 4.2.1, "Fuel Assemblies," to reflect both the existing fuel designs in use and the new AREVA NP fuel design. The change to the fuel assembly description involves a minor revision to reflect that AREVA fuel assemblies have a water channel.

The proposed amendments also revise Technical Specification 4.3, "Fuel Storage," to remove criteria specific to GNF-A fuel storage criticality methods. The criticality analysis criteria being retained in Technical Specifications 4.3.1.1 and 4.3.1.2 will continue to ensure that adequate criticality margins are maintained for new and spent fuel storage.

These changes do not involve any plant modifications or operational changes that could affect system reliability, performance, or possibility of an operator error. These requested changes do not affect any postulated accident precursors, do not affect the performance of any accident mitigation systems, and do not introduce any new accident initiation mechanisms.

Based on the above, the proposed amendments do not involve an increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No

As previously stated, the proposed amendments revise Technical Specification fuel bundle description and fuel storage rack criticality requirements to support receipt and storage of a new fuel bundle manufactured by a different vendor. Analytic methods will continue to be used to demonstrate the criticality acceptability of fuel being stored in the new and spent fuel storage racks. As such, the proposed amendments do not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No

The proposed amendments incorporate an administrative revision to the Technical Specification fuel bundle description and modify the fuel storage Technical Specification requirements to remove vendor-specific nomenclature for criticality analysis criteria. Criticality analyses for new and spent fuel storage will continue to ensure compliance with fuel storage and criticality criteria described in the Updated Final Safety Analysis Report.

Therefore, the proposed amendments do not involve a significant reduction in a margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

The Commission is seeking public comments on this proposed determination. Any comments received within 30 days after the date of publication of this notice will be considered in making any final determination.

Normally, the Commission will not issue the amendment until the expiration of 60 days after the date of publication of this notice. The Commission may issue the license amendment before expiration of the 60-day period provided that its final determination is that the amendment involves no significant hazards consideration. In addition, the Commission may issue the amendment prior to the expiration of the 30-day comment period should circumstances change during the 30-day comment period such that failure to act in a timely way would result, for example, in derating or shutdown of the facility. Should the Commission take action prior to the expiration of either the comment period or the notice period, it will publish in the *Federal Register* a notice of issuance. Should the Commission make a final No Significant Hazards Consideration Determination, any hearing will take place after issuance. The Commission expects that the need to take this action will occur very infrequently.

Written comments may be submitted by mail to the Chief, Rulemaking, Directives and Editing Branch, Division of Administrative Services, Office of Administration, U.S. Nuclear

Regulatory Commission, Washington, DC 20555-0001, and should cite the publication date and page number of this *Federal Register* notice. Written comments may also be delivered to Room 6D59, Two White Flint North, 11545 Rockville Pike, Rockville, Maryland, from 7:30 a.m. to 4:15 p.m. Federal workdays. Documents may be examined, and/or copied for a fee, at the NRC's Public Document Room (PDR), located at One White Flint North, Public File Area O1 F21, 11555 Rockville Pike (first floor), Rockville, Maryland.

The filing of requests for hearing and petitions for leave to intervene is discussed below.

Within 60 days after the date of publication of this notice, the licensee may file a request for a hearing with respect to issuance of the amendment to the subject facility operating license and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written request for a hearing and a petition for leave to intervene. Requests for a hearing and a petition for leave to intervene shall be filed in accordance with the Commission's "Rules of Practice for Domestic Licensing Proceedings" in 10 CFR Part 2. Interested persons should consult a current copy of 10 CFR 2.309, which is available at the Commission's PDR, located at One White Flint North, Public File Area O1F21, 11555 Rockville Pike (first floor), Rockville, Maryland. Publicly available records will be accessible from the Agencywide Documents Access and Management System's (ADAMS) Public Electronic Reading Room on the Internet at the NRC Web site, <http://www.nrc.gov/reading-rm/doc-collections/cfr/>. If a request for a hearing or petition for leave to intervene is filed by the above date, the Commission or a presiding officer designated by the Commission or by the Chief Administrative Judge of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition; and the Secretary or the Chief Administrative Judge of the Atomic Safety and Licensing Board will issue a notice of a hearing or an appropriate order.

As required by 10 CFR 2.309, a petition for leave to intervene shall set forth with

particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following general requirements: 1) the name, address and telephone number of the requestor or petitioner; 2) the nature of the requestor's/petitioner's right under the Act to be made a party to the proceeding; 3) the nature and extent of the requestor's/petitioner's property, financial, or other interest in the proceeding; and 4) the possible effect of any decision or order which may be entered in the proceeding on the requestors/petitioner's interest. The petition must also identify the specific contentions which the petitioner/requestor seeks to have litigated at the proceeding.

Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner/requestor shall provide a brief explanation of the bases for the contention and a concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing. The petitioner/requestor must also provide references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion. The petition must include sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendment under consideration. The contention must be one which, if proven, would entitle the petitioner to relief. A petitioner/requestor who fails to satisfy these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing.

If a hearing is requested, the Commission will make a final determination on the issue of

no significant hazards consideration. The final determination will serve to decide when the hearing is held. If the final determination is that the amendment request involves no significant hazards consideration, the Commission may issue the amendment and make it immediately effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment. If the final determination is that the amendment request involves a significant hazards consideration, any hearing held would take place before the issuance of any amendment.

Nontimely requests and/or petitions and contentions will not be entertained absent a determination by the Commission or the presiding officer of the Atomic Safety and Licensing Board that the petition, request and/or the contentions should be granted based on a balancing of the factors specified in 10 CFR 2.309(c)(1)(i)-(viii).

A request for a hearing or a petition for leave to intervene must be filed by: 1) first class mail addressed to the Office of the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attention: Rulemaking and Adjudications Staff; 2) courier, express mail, and expedited delivery services: Office of the Secretary, Sixteenth Floor, One White Flint North, 11555 Rockville Pike, Rockville, Maryland, 20852, Attention: Rulemaking and Adjudications Staff; 3) E-mail addressed to the Office of the Secretary, U.S. Nuclear Regulatory Commission, [HEARINGDOCKET@NRC.GOV](mailto:HEARINGDOCKET@NRC.GOV); or 4) facsimile transmission addressed to the Office of the Secretary, U.S. Nuclear Regulatory Commission, Washington, DC, Attention: Rulemakings and Adjudications Staff at (301) 415-1101, verification number is (301) 415-1966. A copy of the request for hearing and petition for leave to intervene should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and it is requested that copies be transmitted either by means of facsimile transmission to 301-415-3725 or by email to [OGCMailCenter@nrc.gov](mailto:OGCMailCenter@nrc.gov). A copy of the request for hearing and petition for leave to intervene should also be sent to David T. Conley,

Associate General Counsel II - Legal Department, Progress Energy Service Company, LLC,  
Post Office Box 1551, Raleigh, North Carolina 27602, attorney for the licensee.

For further details with respect to this action, see the application for amendment dated January 22, 2007, which is available for public inspection at the Commission's PDR, located at One White Flint North, File Public Area O1 F21, 11555 Rockville Pike (first floor), Rockville, Maryland. Publicly available records will be accessible from the Agencywide Documents Access and Management System's (ADAMS) Public Electronic Reading Room on the Internet at the NRC Web site, <http://www.nrc.gov/reading-rm/adams.html>. Persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS, should contact the NRC PDR Reference staff by telephone at 1-800-397-4209, 301-415-4737, or by e-mail to [pdr@nrc.gov](mailto:pdr@nrc.gov).

Dated at Rockville, Maryland, this 22nd day of August 2007.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/*

Stewart N. Bailey, Senior Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation