



Progress Energy

James Scarola
Vice President
Brunswick Nuclear Plant
Progress Energy Carolinas, Inc.

OCT 15 2007

SERIAL: BSEP 07-0108
TSC-2006-06

10 CFR 50.90

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Subject: Brunswick Steam Electric Plant, Unit Nos. 1 and 2
Docket Nos. 50-325 and 50-324/License Nos. DPR-71 and DPR-62
Additional Information in Support of Request for License Amendments
Regarding Linear Heat Generation Rate and Core Operating Limits Report
References for AREVA NP Fuel (NRC TAC Nos. MD4063 and MD4064)

References:

1. Letter from James Scarola to the U.S. Nuclear Regulatory Commission (Serial: BSEP 06-0129), "Request for License Amendment Regarding Linear Heat Generation Rate and Core Operating Limits Report References for AREVA NP Fuel," dated January 22, 2007 (ADAMS Accession Number ML070300570)
2. Letter from James Scarola to the U.S. Nuclear Regulatory Commission (Serial: BSEP 07-0053), "Additional Information in Support of Request for License Amendment Regarding Linear Heat Generation Rate and Core Operating Limits Report References for AREVA NP Fuel," dated June 21, 2007 (ADAMS Accession Number ML071840214)
3. Letter from Ben Waldrep to the U.S. Nuclear Regulatory Commission (Serial: BSEP 07-0067), "Additional Information in Support of Request for License Amendment Regarding Linear Heat Generation Rate and Core Operating Limits Report References for AREVA NP Fuel," dated July 18, 2007 (ADAMS Accession Number ML072070305)

Ladies and Gentlemen:

By letter dated January 22, 2007, as supplemented by letters dated June 21, 2007, and July 18, 2007, Carolina Power & Light Company (CP&L), now doing business as Progress Energy Carolinas, Inc., requested a license amendment to revise the Technical Specifications (TS) for the Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2. The proposed changes include: (1) revising TS 5.6.5, "Core Operating Limits Report (COLR)" to add AREVA NP, Inc. (AREVA) topical report references applicable to the use of ATRIUM™-10 fuel, (2) adding a new definition and TS 3.2.3 for linear heat generation

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NRR

rate (LHGR) requirements, and (3) incorporating the new LHGR requirements into existing TS 3.4.1 and 3.7.6. These changes are being made to support the BSEP transition to AREVA manufactured fuel assemblies. During a meeting held on May 23, 2007, CP&L, AREVA, and the NRC discussed CP&L's plan and schedule for submitting additional information to support the ATRIUM™-10 fuel transition. Consistent with those discussions, CP&L is providing the information described below.

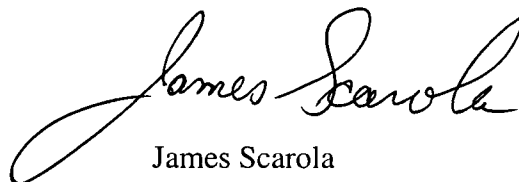
In Enclosure 1, CP&L is providing a copy of AREVA Report ANP-2674(P), Revision 0, *Brunswick Unit 1 Cycle 17 Reload Safety Analysis*, dated September 2007. This report provides the results of the reload licensing analyses performed for BSEP Unit 1 Reload 16 for Cycle 17. ANP-2674(P), Revision 0, contains information that AREVA considers to be proprietary as defined by 10 CFR 2.390. AREVA, as the owner of the proprietary information, has executed the affidavit provided in Enclosure 2, which identifies that the enclosed proprietary information has been handled and classified as proprietary, is customarily held in confidence, and has been withheld from public disclosure. AREVA requests that the enclosed proprietary information be withheld from public disclosure in accordance with the provisions of 10 CFR 2.390. A non-proprietary version of ANP-2674(P), Revision 0, is provided in Enclosure 3.

On July 31 through August 2, 2007, the NRC visited the AREVA offices in Richland, Washington. During the visit, the NRC was provided a presentation by AREVA that included an overview of the AREVA safety analysis methodology being used to support the ATRIUM™-10 fuel transition and a discussion of the applicability of AREVA's methodologies to operation at extended power uprate conditions. A copy of the presentation slides is provided in Enclosure 4. These presentation slides contain information that AREVA considers to be proprietary as defined by 10 CFR 2.390. AREVA, as the owner of the proprietary information, has executed the affidavit provided in Enclosure 5, which identifies that the enclosed proprietary information has been handled and classified as proprietary, is customarily held in confidence, and has been withheld from public disclosure. AREVA requests that the enclosed proprietary information be withheld from public disclosure in accordance with the provisions of 10 CFR 2.390. A non-proprietary version of the presentation slides is provided in Enclosure 6.

There are no regulatory commitments associated with this submittal. Please refer any questions regarding this submittal to Mr. Randy C. Ivey, Manager - Support Services, at (910) 457-2447.

I declare, under penalty of perjury, that the foregoing is true and correct. Executed on October 15, 2007.

Sincerely,



James Scarola

WRM/wrm

Enclosures:

1. AREVA Report ANP-2674(P), Revision 0, *Brunswick Unit 1 Cycle 17 Reload Safety Analysis*, dated September 2007
(Proprietary Information – Withhold from Public Disclosure in Accordance With 10 CFR 2.390)
2. AREVA Affidavit Regarding Withholding ANP-2642(P), Revision 0, from Public Disclosure
3. AREVA Report ANP-2674(NP), Revision 0, *Brunswick Unit 1 Cycle 17 Reload Safety Analysis*, dated September 2007
4. AREVA Presentation Slides for Brunswick Fuel Transition License Amendment Request
(Proprietary Information – Withhold from Public Disclosure in Accordance With 10 CFR 2.390)
5. AREVA Affidavit Regarding Withholding from Public Disclosure the AREVA Presentation Slides for Brunswick Fuel Transition License Amendment Request
6. AREVA Presentation Slides for Brunswick Fuel Transition License Amendment Request (Non-proprietary Version)

cc (with Enclosures 1, 2, 3, 4, 5, and 6):

U. S. Nuclear Regulatory Commission, Region II
ATTN: Dr. William D. Travers, Regional Administrator
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW, Suite 23T85
Atlanta, GA 30303-8931

U. S. Nuclear Regulatory Commission
ATTN: Mr. Joseph D. Austin, NRC Senior Resident Inspector
8470 River Road
Southport, NC 28461-8869

U. S. Nuclear Regulatory Commission **(Electronic Copy Only)**
ATTN: Mr. Stewart N. Bailey (Mail Stop OWFN 8B1)
11555 Rockville Pike
Rockville, MD 20852-2738

cc (with Enclosures 2, 3, 5, and 6):

Chair - North Carolina Utilities Commission
P.O. Box 29510
Raleigh, NC 27626-0510

Ms. Beverly O. Hall, Section Chief
Radiation Protection Section, Division of Environmental Health
North Carolina Department of Environment and Natural Resources
3825 Barrett Drive
Raleigh, NC 27609-7221

Mr. Jack Given, Bureau Chief
North Carolina Department of Labor
Boiler Safety Bureau
1101 Mail Service Center
Raleigh, NC 27699-1101

BSEP 07-0108
Enclosure 2

AREVA Affidavit Regarding Withholding
ANP-2674(P), Revision 0,
from Public Disclosure

AFFIDAVIT

STATE OF WASHINGTON)
) ss.
COUNTY OF BENTON)

1. My name is Jerald S. Holm. I am Manager, Product Licensing, for AREVA NP Inc. and as such I am authorized to execute this Affidavit.

2. I am familiar with the criteria applied by AREVA NP to determine whether certain AREVA NP information is proprietary. I am familiar with the policies established by AREVA NP to ensure the proper application of these criteria.

3. I am familiar with the AREVA NP information contained in the report ANP-2674(P) Revision 0, *Brunswick Unit 1 Cycle 17 Reload Safety Analysis*, dated September 2007, and referred to herein as "Document." Information contained in this Document has been classified by AREVA NP as proprietary in accordance with the policies established by AREVA NP for the control and protection of proprietary and confidential information.

4. This Document contains information of a proprietary and confidential nature and is of the type customarily held in confidence by AREVA NP and not made available to the public. Based on my experience, I am aware that other companies regard information of the kind contained in this Document as proprietary and confidential.

5. This Document has been made available to the U.S. Nuclear Regulatory Commission in confidence with the request that the information contained in this Document be withheld from public disclosure. The request for withholding of proprietary information is made in accordance with 10 CFR 2.390. The information for which withholding from disclosure is

requested qualifies under 10 CFR 2.390(a)(4) "Trade secrets and commercial or financial information".

6. The following criteria are customarily applied by AREVA NP to determine whether information should be classified as proprietary:

- (a) The information reveals details of AREVA NP's research and development plans and programs or their results.
- (b) Use of the information by a competitor would permit the competitor to significantly reduce its expenditures, in time or resources, to design, produce, or market a similar product or service.
- (c) The information includes test data or analytical techniques concerning a process, methodology, or component, the application of which results in a competitive advantage for AREVA NP.
- (d) The information reveals certain distinguishing aspects of a process, methodology, or component, the exclusive use of which provides a competitive advantage for AREVA NP in product optimization or marketability.
- (e) The information is vital to a competitive advantage held by AREVA NP, would be helpful to competitors to AREVA NP, and would likely cause substantial harm to the competitive position of AREVA NP.

The information in the Document is considered proprietary for the reasons set forth in paragraphs 6(b) and 6(d) above.

7. In accordance with AREVA NP's policies governing the protection and control of information, proprietary information contained in this Document have been made available, on a limited basis, to others outside AREVA NP only as required and under suitable agreement providing for nondisclosure and limited use of the information.

8. AREVA NP policy requires that proprietary information be kept in a secured file or area and distributed on a need-to-know basis.

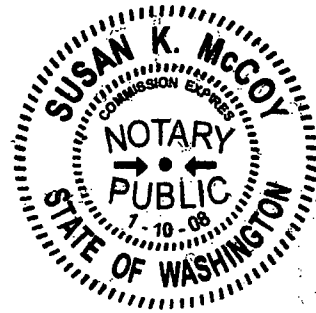
9. The foregoing statements are true and correct to the best of my knowledge, information, and belief.

Gerald S Holm

SUBSCRIBED before me this 28th
day of September, 2007.

Susan K McCoy

Susan K. McCoy
NOTARY PUBLIC, STATE OF WASHINGTON
MY COMMISSION EXPIRES: 1/10/2008



BSEP 07-0108
Enclosure 5

AREVA Affidavit
Regarding Withholding
AREVA Presentation Slides
for Brunswick Fuel Transition
License Amendment Request
from Public Disclosure

AFFIDAVIT

STATE OF WASHINGTON)
) ss.
COUNTY OF BENTON)

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- (d) The information reveals certain distinguishing aspects of a process, methodology, or component, the exclusive use of which provides a competitive advantage for AREVA NP in product optimization or marketability.
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8. AREVA NP policy requires that proprietary information be kept in a secured file or area and distributed on a need-to-know basis.

9. The foregoing statements are true and correct to the best of my knowledge,
information, and belief.

Jerald A Holm

SUBSCRIBED before me this 30th
day of August, 2007.

Susan K McCoy

Susan K. McCoy
NOTARY PUBLIC, STATE OF WASHINGTON
MY COMMISSION EXPIRES: 1/10/2008

