



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

May 16, 2016

Mr. Joseph W. Shea
Vice President, Nuclear Licensing
Tennessee Valley Authority
1101 Market Street, LP 3R-C
Chattanooga, TN 37402-2801

SUBJECT: BROWNS FERRY NUCLEAR PLANT, UNITS 1, 2, AND 3 – REQUEST FOR
WITHHOLDING INFORMATION FROM PUBLIC DISCLOSURE
(CAC NOS. MF6741, MF6742, AND MF6743)

Dear Mr. Shea:

By letter dated September 21, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15282A154), Tennessee Valley Authority (the licensee) submitted affidavits dated March 12, March 25, May 5, August 11, August 11, August 12, August 12, August 12, August 19, August 19, August 19, August 19, August 20, August 20, and October 9, 2015, to the U.S. Nuclear Regulatory Commission (NRC), executed by Mr. Alan B. Meginnis, Manager, AREVA, Inc. (AREVA), requesting that the information contained in the following proprietary documents (Attachments 30, 32, 28, 16, 18, 34, 26, 24, 10, 12, 14, 8, 20, 37, and 22, respectively of the letter dated September 21, 2015) be withheld from public disclosure pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR), Part 2, Section 2.390:

1. ANP-3327P, Revision 1, "Evaluation of AREVA Fuel Thermal-hydraulic Performance for Browns Ferry at EPU [Extended Power Uprate]," March 2015 (Attachment 30 of the LAR [license amendment request]).
2. FS1-0019629, Revision 1, "Browns Ferry Unit 3 Cycle 19 MCPR [Minimum Critical Power Ratio] Safety Limit Analysis With SAFLIM3D Methodology," March 2015 (Attachment 32 of the LAR).
3. ANP-3388P, Revision 0, "Fuel Rod Thermal-Mechanical Evaluation for Browns Ferry Extended Power Uprate," May 2015 (Attachment 28 of the LAR).
4. ANP-3342P, Revision 1, "Browns Ferry EPU (120% OLTP [Original Licensed Thermal Power]) Equilibrium Fuel Cycle Design," August 2015 (Attachment 16 of the LAR).
5. ANP-3372P, Revision 1, "Browns Ferry Unit 3 Cycle 19 EPU (120% OLTP) LAR Reference Fuel Cycle Design," August 2015 (Attachment 18 of the LAR).
6. ANP-2860P, Revision 2, Supplement 2P Revision 1, "Browns Ferry Unit 1 – Summary of Responses to Request for Additional Information, Extension for Use of ATRIUM 10XM Fuel for Extended Power Uprate," August 2015 (Attachment 34 of the LAR).
7. ANP-3385P, Revision 1, "Mechanical Design Report for Browns Ferry Units 1, 2, and 3 Extended Power Uprate (EPU) ATRIUM-10 Fuel Assemblies, Licensing Report," August 2015 (Attachment 26 of the LAR).
8. ANP-3386P, Revision 1, "Mechanical Design Report for Browns Ferry Units 1, 2, and 3 Extended Power Uprate (EPU) ATRIUM 10XM Fuel Assemblies, Licensing Report," August 2015 (Attachment 24 of the LAR).

9. ANP-3377P, Revision 3, "Browns Ferry Units 1, 2, and 3 LOCA [Loss-of-Coolant Accident] Break Spectrum Analysis for ATRIUM-10XM Fuel (EPU)," August 2015 (Attachment 10 of the LAR).
10. ANP-3378P, Revision 3, "Browns Ferry Units 1, 2, and 3 LOCA-ECCS [Emergency Core Cooling system] Analysis MAPLHGR [Maximum Average Planar Linear Heat Generation Rate] Limits for ATRIUM 10XM Fuel (EPU)," August 2015 (Attachment 12 of the LAR).
11. ANP-3384P, Revision 3, "Browns Ferry Units 1, 2, and 3 LOCA-ECCS Analysis MAPLHGR Limits for ATRIUM-10 Fuel (EPU)," August 2015 (Attachment 14 of the LAR).
12. ANP-3403P, Revision 2, "Fuel Uprate Safety Analysis Report for Browns Ferry Units 1, 2, and 3," August 2015 (Attachment 8 of the LAR).
13. ANP-3404P, Revision 2, "Browns Ferry Unit 3 Cycle 19 Representative Reload Analysis at Extended Power Uprate," August 2015 (Attachment 20 of the LAR).
14. ANP-3409P, Revision 2, "Fuel-Related Emergent Regulatory Issues," August 2015 (Attachment 37 of the LAR).
15. ANP-3343P, Revision 0, "Nuclear Fuel Design Report Browns Ferry EPU (120% OLTP) Equilibrium Cycle ATRIUM 10XM Fuel," October 2014 (Attachment 22 of the LAR).

Nonproprietary copies of the following documents (Attachments 31, 33, 29, 17, 19, 35, 27, 25, 11, 13, 15, 9, 21, 38, and 23, respectively of the letter dated September 21, 2015) have been placed in the NRC's Public Document Room and added to the NRC Library in the ADAMS.

1. ANP-3327NP, Revision 1, "Evaluation of AREVA Fuel Thermal-Hydraulic Performance for Browns Ferry at EPU," March 2015 (non-proprietary) (Attachment 31 of the LAR) (ADAMS Accession No. ML15282A221).
2. FS1-0019630, Revision 1, "Browns Ferry Unit 3 Cycle 19 MCPR Safety Limit Analysis With SAFLIM3D Methodology," March 2015 (non-proprietary) (Attachment 33 of the LAR) (ADAMS Accession No. ML15282A222).
3. ANP-3388NP, Revision 0, "Fuel Rod Thermal-Mechanical Evaluation for Browns Ferry Extended Power Uprate," May 2015 (non-proprietary) (Attachment 29 of the LAR) (ADAMS Accession No. ML15282A194).
4. ANP-3342NP, Revision 1, "Browns Ferry EPU (120% OLTP) Equilibrium Fuel Cycle Design," August 2015 (non-proprietary) (Attachment 17 of the LAR) (ADAMS Accession No. ML15282A188).
5. ANP-3372NP, Revision 1, "Browns Ferry Unit 3 Cycle 19 EPU (120% OLTP) LAR Reference Fuel Cycle Design," August 2015 (non-proprietary) (Attachment 19 of the LAR) (ADAMS Accession No. ML15282A189).
6. ANP-2860NP, Revision 2, Supplement 2NP Revision 1, "Browns Ferry Unit 1 – Summary of Responses to Request for Additional Information, Extension for Use of ATRIUM 10XM Fuel for Extended Power Uprate," August 2015 (non-proprietary) (Attachment 35 of the LAR) (ADAMS Accession No. ML15282A223).
7. ANP-3385NP, Revision 1, "Mechanical Design Report for Browns Ferry Units 1, 2, and 3 Extended Power Uprate (EPU) ATRIUM-10 Fuel Assemblies, Licensing Report," August 2015 (non-proprietary) (Attachment 27 of the LAR) (ADAMS Accession No. ML15282A193).

8. ANP-3386NP, Revision 1, "Mechanical Design Report for Browns Ferry Units 1, 2, and 3 Extended Power Uprate (EPU) ATRIUM 10XM Fuel Assemblies, Licensing Report," August 2015 (non-proprietary) (Attachment 25 of the LAR) (ADAMS Accession No. ML15282A192).
9. ANP-3377NP, Revision 3, "Browns Ferry Units 1, 2, and 3 LOCA Break Spectrum Analysis for ATRIUM-10XM Fuel (EPU)," August 2015 (non-proprietary) (Attachment 11 of the LAR) (ADAMS Accession No. ML15282A184).
10. ANP-3378NP, Revision 3, "Browns Ferry Units 1, 2, and 3 LOCA-ECCS Analysis MAPLHGR Limits for ATRIUM 10XM Fuel (EPU)," August 2015 (non-proprietary) (Attachment 13 of the LAR) (ADAMS Accession No. ML15282A185).
11. ANP-3384NP, Revision 3, "Browns Ferry Units 1, 2, and 3 LOCA-ECCS Analysis MAPLHGR Limits for ATRIUM-10 Fuel (EPU)," August 2015 (non-proprietary) (Attachment 15 of the LAR) (ADAMS Accession No. ML15282A187).
12. ANP-3403NP, Revision 2, "Fuel Uprate Safety Analysis Report for Browns Ferry Units 1, 2, and 3," August 2015 (non-proprietary) (Attachment 9 of the LAR) (ADAMS Accession No. ML15282A182).
13. ANP-3404NP, Revision 2, "Browns Ferry Unit 3 Cycle 19 Representative Reload Analysis at Extended Power Uprate," August 2015 (non-proprietary) (Attachment 21 of the LAR) (ADAMS Accession No. ML15282A190).
14. ANP-3409NP, Revision 2, "Fuel-Related Emergent Regulatory Issues," August 2015 (non-proprietary) (Attachment 38 of the LAR) (ADAMS Accession No. ML15282A225).
15. ANP-3343NP, Revision 0, "Nuclear Fuel Design Report Browns Ferry EPU (120% OLTP) Equilibrium Cycle ATRIUM 10XM Fuel," October 2014 (non-proprietary) (Attachment 23 of the LAR) (ADAMS Accession No. ML15282A191).

The AREVA affidavits dated March 12, March 25, May 5, August 11, August 11, August 12, August 12, August 12, August 19, August 19, August 19, August 19, August 20, August 20, and October 9, 2015, stated that the submitted information should be considered exempt from mandatory public disclosure for the following reasons:

- (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.
- (d) The Information reveals certain distinguishing aspects of a process, methodology, or component, the exclusive use of which provides a competitive advantage for AREVA in product optimization or marketability.
- (e) The information is vital to a competitive advantage held by AREVA, would be helpful to competitors to AREVA, and would likely cause substantial harm to the competitive position of AREVA.

We have reviewed your application and the material in accordance with the requirements of 10 CFR 2.390 and, on the basis of the statements in the affidavit, have determined that the

J.Shea

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submitted information sought to be withheld contains proprietary commercial information and should be withheld from public disclosure.

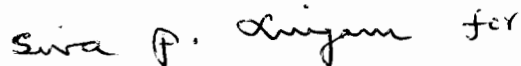
Therefore, the submitted information marked as proprietary will be withheld from public disclosure pursuant to 10 CFR 2.390(b)(5) and Section 103(b) of the Atomic Energy Act of 1954, as amended.

Withholding from public inspection shall not affect the right, if any, of persons properly and directly concerned to inspect the documents. If the need arises, we may send copies of this information to our consultants working in this area. We will, of course, ensure that the consultants have signed the appropriate agreements for handling proprietary information.

If the basis for withholding this information from public inspection should change in the future such that the information could then be made available for public inspection, you should promptly notify the NRC. You also should understand that the NRC may have cause to review this determination in the future, for example, if the scope of a Freedom of Information Act request includes your information. In all review situations, if the NRC makes a determination adverse to the above, you will be notified in advance of any public disclosure.

If you have any questions, please contact me at (301) 415-1447 or Farideh.Saba@nrc.gov.

Sincerely,

A handwritten signature in dark ink, appearing to read "Saba E. Saba" followed by a flourish.

Farideh E. Saba, Senior Project Manager
Plant Licensing Branch 2-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-259, 50-260, and 50-296

cc: Mr. Alan B. Meginnis
Manager, Product Licensing
AREVA NP Inc.
3315 Old Forest Road
Lynchburg, VA 24501

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If you have any questions, please contact me at (301) 415-1447 or Farideh.Saba@nrc.gov.

Sincerely,

/RA by SLingam for/

Farideh E. Saba, Senior Project Manager
Plant Licensing Branch 2-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-259, 50-260, and 50-296

cc: Mr. Alan B. Meginnis
Manager, Product Licensing
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Lynchburg, VA 24501

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