



June 6, 2016
E-44181

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
One White Flint North
11555 Rockville Pike
Rockville, MD 20852

Subject: Second Response to NRC Request for Additional Information - AREVA Inc. Renewal Application for the Standardized NUHOMS[®] System- CoC 1004 (Docket 72-1004, TAC No. L24760)

- References:
- 1) Letter from B. Jennifer Davis (NRC) to Donis Shaw (AREVA TN), "First Request for Additional Information for Review of Renewal Application for the Standardized NUHOMS[®] System (TAC NO. L24964)," July 29, 2015.
 - 2) Letter E-42059 from Paul Triska (AREVA Inc.) to Document Control Desk (NRC), "Revision 1 to Renewal Application for the Standardized NUHOMS[®] System – CoC 1004, Response to First Request for Additional Information (Docket No. 72-1004, TAC NO. L24964)," October 16, 2015.
 - 3) Letter from Christian Jacobs (NRC) to Paul Triska (AREVA Inc.), "Second Request For Additional Information for Review of Renewal Application for the Standardized NUHOMS[®] System, Certificate of Compliance No. 1004, Docket No. 72-1004 (TAC NO. L24964)," March 1, 2016.
 - 4) Letter E-39887 from Paul Triska (AREVA Inc.) to Document Control Desk (NRC), "Renewal Application for the Standardized NUHOMS[®] System - CoC 1004", November 4, 2014.

Reference 1 advised AREVA Inc. that NRC staff determined further information was needed to complete its technical review of AREVA Inc.'s November 4, 2014 application for renewal of the spent fuel storage cask Certificate of Compliance (CoC) No. 1004 for the Standardized NUHOMS[®] Horizontal Modular Storage System for Irradiated Nuclear Fuel (Reference 4). Reference 2 is the response to the first request for additional information (RAI). Reference 3 is the second request for additional information. This submittal provides responses to the second request for additional information.

Enclosure 2 herein provides a proprietary version of the response to the RAI items. Enclosure 3 provides a public version of the response to the RAI items. Each RAI response has a section stating the impact of the RAI response on the renewal application indicating which application sections, tables, etc., have been changed. Enclosure 4 provides the proprietary version of a complete revision to the renewal application, denoted as Revision 2. The public version of Revision 2 to the renewal application is provided as Enclosure 5. Enclosure 6 provides a list of additional changes to the renewal application, not associated with RAI responses, along with a

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~~Enclosures transmitted herein contain SUNSI.~~ When separated from enclosures, this transmittal document is decontrolled.

reason. All renewal application changes are tracked with italicized text and revision bars in the right margin, for NRC staff reviewers' convenience.

Enclosures 7 through 10 provide calculations referenced in the RAI responses. Enclosure 12 provides computer files referenced in the RAI responses with a summary listing of these files provided in Enclosure 11. Enclosures 7 through 10 and Enclosure 12 are proprietary in their entirety.

This submittal includes proprietary information, which may not be used for any purpose other than to support NRC staff review of the application. In accordance with 10 CFR 2.390, an affidavit (Enclosure 1) is provided specifically requesting that NRC withhold this proprietary information from public disclosure.

This submittal is being provided as an electronic submission, using the optical storage media (OSM) provision from Section 4 of the NRC Guidance for Electronic Submissions to the NRC. Accordingly, we have included a Document Components listing and OSM#1 and OSM#2 listings at the end of this cover letter.

Should NRC staff have any questions or require additional information to support review of this application, please contact Mr. Dennis Williford by telephone at 704-805-2223 or by e-mail at Dennis.Williford@areva.com.

Sincerely,



Jayant Bondre
Vice President, Chief Technical Officer

cc: Christian Jacobs (NRC SFM), as follows, all provided in a separate mailing:

- Ten computer disks with the cover letter and Enclosures 1 through 12 (i.e., OSM#1)

Enclosures:

1. Affidavit Pursuant to 10 CFR 2.390
2. RAIs and Responses (Proprietary Version)
3. RAIs and Responses (Public Version)
4. Certificate of Compliance Renewal Application for the Standardized NUHOMS[®] System, Certificate of Compliance No. 1004 (Docket No. 72-1004), Revision 2 (Proprietary Version)
5. Certificate of Compliance Renewal Application for the Standardized NUHOMS[®] System, Certificate of Compliance No. 1004 (Docket No. 72-1004), Revision 2 (Public Version)
6. List of Additional Changes Not Associated with the RAIs
7. Calculation 67009-TLAA09, Revision 2, *Confinement Evaluation of NUHOMS 24P and 52B DSCs for Normal, Off-Normal and Accident Conditions for the CoC 1004 Renewal Period* (Proprietary)
8. Calculation 67009-TLAA22, Revision 2, *Defense in Depth Dose Assessment Evaluation Assuming Breach of DSC Confinement Boundary after 40 and 60 Years of Storage* (Proprietary)
9. Calculation 67009-TLAA10, Revision 0, *Outer Surface Weld Temperature of the NUHOMS[®] DSCs Stored in the Standardized HSM* (Proprietary)

10. Calculation 67009-TLAA12, Revision 1, *Outer Surface Weld Temperature of the NUHOMS® DSCs Stored in the HSM Model 152* (Proprietary)
11. Listing of Computer Files Provided in Enclosure 12
12. Computer Files associated with the RAI Responses (Proprietary)

Document Components:

001 Public AREVA Inc. Transmittal Letter.pdf, 754,438 bytes
002 Public Enc 1 Affidavit.pdf, 373,868 bytes
003 SUNSI Enc 2 RAIs and Responses.pdf, 7,847,923 bytes, Proprietary
004 Public Enc 3 RAIs and Responses.pdf, 242,367 bytes
005 SUNSI Enc 4 CoC 1004 Ren App R2-Propri.pdf, 24,576,707 bytes, Proprietary
006 Public Enc 5 CoC 1004 Ren App R2-Public.pdf, 7,324,785 bytes
007 Public Enc 6 List of nonRAI Changes.pdf, 94,158 bytes
008 SUNSI Enc 7 Calc 67009-TLAA09 R2.pdf, 2,370,453 bytes, Proprietary
009 SUNSI Enc 8 Calc 67009-TLAA22 R2.pdf, 2,238,226 bytes, Proprietary
010 SUNSI Enc 9 Calc 67009-TLAA10 R0.pdf, 25,880,934 bytes, Proprietary
011 SUNSI Enc 10 Calc 67009-TLAA12 R1.pdf, 16,982,177 bytes, Proprietary
012 Public Enc 11 List of Enc 12 files.pdf, 95,446 bytes
013 SUNSI Enc 12 Computer Files (folder) 1,910,718,404 bytes, Proprietary

OSM#1 (Entire Submittal) (DVD):

001 Public AREVA Inc. Transmittal Letter.pdf, 754,438 bytes
002 Public Enc 1 Affidavit.pdf, 373,868 bytes
003 SUNSI Enc 2 RAIs and Responses.pdf, 7,847,923 bytes, Proprietary
004 Public Enc 3 RAIs and Responses.pdf, 242,367 bytes
005 SUNSI Enc 4 CoC 1004 Ren App R2-Propri.pdf, 24,576,707 bytes, Proprietary
006 Public Enc 5 CoC 1004 Ren App R2-Public.pdf, 7,324,785 bytes
007 Public Enc 6 List of nonRAI Changes.pdf, 94,158 bytes
008 SUNSI Enc 7 Calc 67009-TLAA09 R2.pdf, 2,370,453 bytes, Proprietary
009 SUNSI Enc 8 Calc 67009-TLAA22 R2.pdf, 2,238,226 bytes, Proprietary
010 SUNSI Enc 9 Calc 67009-TLAA10 R0.pdf, 25,880,934 bytes, Proprietary
011 SUNSI Enc 10 Calc 67009-TLAA12 R1.pdf, 16,982,177 bytes, Proprietary
012 Public Enc 11 List of Enc 12 files.pdf, 95,446 bytes
013 SUNSI Enc 12 Computer Files (folder) 1,910,718,404 bytes, Proprietary

OSM#2 (Public Information Only) (DVD):

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002 Public Enc 1 Affidavit.pdf, 373,868 bytes
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