



10 CFR 70.5

July 13, 2010

AES-O-NRC-10-00387

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

AREVA Enrichment Services LLC  
Eagle Rock Enrichment Facility  
NRC Docket No: 70-7015

**Subject: Supplemental Response to Requests for Additional Information – AREVA  
Enrichment Services LLC License Application for the Eagle Rock Enrichment Facility**

On August 27, 2009, the U.S. Nuclear Regulatory Commission (NRC) transmitted to AREVA Enrichment Services LLC (AES) Requests for Additional Information (RAI) regarding the Eagle Rock Enrichment Facility (EREF) License Application (Ref. 1). On September 28, 2009, AES submitted the responses to those NRC RAIs (Ref. 2). Subsequently, the NRC requested additional information for Items Relied On For Safety (IROFS) that contain safe-by-design component attributes. Additional information was provided for those IROFS by AES on January 7, 2010 (Ref. 3). During a discussion with the NRC on May 10, 2010, AES agreed to 1) list the IROFS that contain safe-by-design component attributes as sole IROFS in the Integrated Safety Analysis (ISA) Summary, 2) add a discussion in the Safety Analysis Report (SAR) on what constitutes a change for IROFS that contain a safe-by-design component attribute, and 3) include the markup pages from the response to RAI ISA-10. Enclosures 2 and 3 provide the AES supplemental information for these changes.

Enclosure 2 provides the discussion added to the SAR on what constitutes a change for IROFS that contain a safe-by-design component attribute.

Enclosure 3 provides the ISA Summary markups for the sole-IROFS designations and ISA-10 changes and contains security-related sensitive unclassified non-safeguards information (SUNSI) that AES requests be withheld from public disclosure in accordance with 10 CFR 2.390. This information contains markups of information that the NRC previously identified as SUNSI. In accordance with 10 CFR 2.390(b), an affidavit supporting our request to withhold this security-related information is provided in Enclosure 1.

The EREF License Application will be revised to include the changes identified in the markups provided in Enclosures 2 and 3 in Revision 3 of the EREF License Application.

**AREVA ENRICHMENT SERVICES LLC**

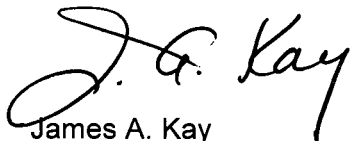
Solomon Pond Park - 400 Donald Lynch Boulevard, Marlborough, MA 01752  
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If you have any questions regarding this submittal, please contact me at (508) 573-6554.

Respectfully,



James A. Kay  
Licensing Manager

References:

- 1) B. Reilly (U.S. Nuclear Regulatory Commission) Letter to Jim Kay, Licensing Manager, Eagle Rock Enrichment Facility, AREVA Enrichment Services LLC, Request for Additional Information - AREVA Enrichment Services LLC License Application for the Eagle Rock Enrichment Facility, dated August 27, 2009.
- 2) J. Kay (AES) Letter to the U.S. Nuclear Regulatory Commission, Response to Requests for Additional Information, AREVA Enrichment Services LLC License Application for the Eagle Rock Enrichment Facility, dated September 28, 2009.
- 3) J. Kay (AES) Letter to the U.S. Nuclear Regulatory Commission, Re-categorizing Safe-by-Design Components, dated January 7, 2010.

Enclosures:

- 1) Affidavit of James A. Kay
- 2) SAR Markup
- 3) ISA Summary Markups

Commitment:

The changes identified in the markups provided in Enclosures 2 and 3 will be included in Revision 3 of the EREF License Application.

cc:

Breda Reilly, U.S. NRC Senior Project Manager

- a) I am the Licensing Manager for the AREVA Enrichment Services LLC (AES), and as such have the responsibility of reviewing the security-related information sought to be withheld from public disclosure in connection with our application to construct and operate a uranium enrichment facility. I am authorized to apply for the withholding of such security-related information from public disclosure on behalf of AES.
- b) I am making this affidavit in conformance with the provisions of 10 CFR 2.390 of the regulations of the Nuclear Regulatory Commission (NRC), and in conjunction with AES's request for withholding, which is accompanied by this affidavit.
- c) I have knowledge of the criteria used by AES in designating information as sensitive unclassified security-related information (SUNSI).
- d) By this submittal, AES seeks to protect from disclosure certain information designated as SUNSI contained in Enclosure 3 for the Security-Related Markups of the Integrated Safety Analysis Report.

This affidavit discusses the bases for withholding certain portions of this submittal, as indicated therein, from public disclosure.

- e) Pursuant to the provisions of 10 CFR 2.390(b)(4), the following is furnished for consideration by the NRC in determining whether the security-related information sought to be protected should be withheld from public disclosure.
  - 1. For the sensitive unclassified security-related information (SUNSI) the information was identified as SUNSI by the NRC and by AES using the guidance in NRC Regulatory Issue Summary (RIS) 2005-31, "Control of Security-Related Sensitive Unclassified Non-Safeguards Information Handled by Individuals, Firms, and Entities Subject to NRC Regulation of the Use of Source, Byproduct, and Special Nuclear Material."
  - 2. The information sought to be withheld is being provided to the NRC in confidence, and, under the provisions of 10 CFR 2.390, it is to be received in confidence by the NRC.
  - 3. The information sought to be withheld is not available in public sources, to the best of AES's knowledge and belief.

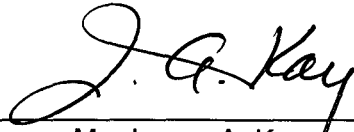
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**Enclosure 1**  
**Affidavit of James A. Kay**

For all of the reasons discussed above, AES requests that the identified security-related information be withheld from public disclosure.

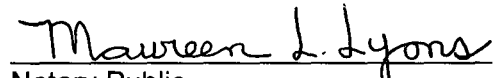
I declare under penalty of perjury that the foregoing is true and correct.

Executed on July 13, 2010



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Mr. James A. Kay  
Licensing Manager of AES LLC  
400 Donald Lynch Boulevard  
Marlborough, MA 01752

  
Notary Public

AREVA Enrichment Services LLC  
Eagle Rock Enrichment Facility  
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**Enclosure 2**  
**SAR Markup**

- QA aspects
- Potential operability or maintainability concerns
- Constructability concerns
- Post-modification testing requirements
- Environmental considerations
- Human factors.

After completion of a modification to a structure, system, or component, the modification project engineer shall ensure that all applicable testing has been completed to ensure correct operation of the system(s) affected by the modification and documentation regarding the modification is complete. In order to ensure operators are able to operate a modified system safely, when a modification is complete, all documents necessary, e.g., the revised process description, checklists for operation and flowsheets are made available to operations and maintenance departments once the modified system becomes "operational." Appropriate training on the modification is completed before a system is placed in operation. A formal notice of a modification being completed is distributed to all appropriate managers. As-built drawings incorporating the modification are completed promptly. These records shall be identified and shall be retained for the duration of the facility license.

Insert

#### 11.1.5 Assessments

Periodic assessments of the configuration management program are conducted to determine the system's effectiveness and to correct deficiencies. These assessments include review of the adequacy of documentation and system walk downs of the as-built facility. Such assessments are conducted and documented in accordance with procedures and scheduled as discussed in Appendix A, Section 18, Internal Audits.

Periodic assessments of the configuration management program and of the design confirm that the system meets its goals and that the design is consistent with the design bases. Incident investigations occur in accordance with the QA Program and associated CAP procedures in the event problems are encountered. Prompt corrective actions are developed as a result of incident investigations or in response to adverse audit/assessment results, in accordance with CAP procedures.

#### **Insert for SAR Section 11.1.4.2**

Changes to passive IROFS that contain a safe-by-design component attribute of diameter, slab thickness, volume, or physical arrangement are implemented by the safe-by-design component attribute where the component attribute shall not exceed the 6.0 w/o enrichment safe value per SAR Table 5.1-1.

For example, the safe-by-design component product takeoff piping (largest pipe in the system) is designed to have a diameter to be 16.03 cm. The 6.0 w/o enrichment critical value of diameter is 24.8 cm. The current margin for this component is 35% which exceeds the required minimum 10% margin. If during the design or construction phase, a larger pipe diameter is needed for the product takeoff system, the actual design diameter could be increased up to 22.32 cm without invalidating the defined IROFS.

If AES changes the design diameter from 16.03 cm to 22.32 cm for the product piping, AES has not modified IROFS96 since the design does not exceed the 6.0 w/o enrichment safe value of diameter per SAR Table 5.1-1 less the significant margin as defined as a margin of at least 10%. Therefore, in processing this design change, the 10 CFR 70.72 review conducted on this design change would not require prior NRC review.