



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

June 26, 2018

Mr. Philip Noss
Licensing Manager
AREVA Federal Services LLC
505 S. 336th Street, Suite 400
Federal Way, WA 98003

SUBJECT: APPLICATION FOR THE AMENDMENT REQUEST OF CERTIFICATE OF COMPLIANCE NO. 9341 FOR THE BRR PACKAGE – REQUEST FOR ADDITIONAL INFORMATION

Dear Mr. Noss:

By letter dated January 30, 2018, AREVA Federal Services LLC (AFS) submitted an application in accordance with Title 10 of the *Code of Federal Regulations* Part 71 to amend Certificate of Compliance No. 9341 for the Model No. BRR package per the details of the submitted revision of the safety analysis report for the BRR package, Revision 11. The cover letter to this request and a publicly available version of the report can be found in our agency's document database, the Agencywide Documents Access and Management System (ADAMS) at Accession Numbers ML18044A148 and ML18044A164, respectively.

In connection with the U.S. Nuclear Regulatory Commission (NRC) staff review, we need the information identified in the enclosure to this letter. Additional information requested by this letter should be submitted in the form of revised pages. Please provide your response within 2 months from the date of this letter.

Please reference Docket No. 71-9341 and Enterprise Project Identifier No. L-2018-LLA-0028 in future correspondence related to this request. The staff is available to meet to discuss your proposed responses. If you have any questions, I may be contacted at (301) 415-5196.

Sincerely,

/RA/

Nishka Devaser, Project Manager
Spent Fuel Licensing Branch
Division of Spent Fuel Management
Office of Nuclear Material Safety
and Safeguards

Docket No. 71-9341
EPID No. L-2018-LLA-0028

Enclosure:
Request for Additional Information

APPLICATION FOR THE AMENDMENT REQUEST OF CERTIFICATE OF COMPLIANCE NO. 9341 FOR THE BRR PACKAGE – REQUEST FOR ADDITIONAL INFORMATION, DOCUMENT DATE: June 26, 2018

Distribution: DSFM r/f,

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ADAMS Package No.: ML18179A428 *via e-mail

OFC	DSFM	DSFM	DSFM	DSFM	DSFM
NAME	NDevaser*	WWheatley*	ASotomayor-Rivera*	TTate*	JMcKirgan
DATE	06/21/18	06/21/18	06/21/18	06/26/18	06/26/18

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Request for Additional Information
AREVA Federal Services LLC
Docket No. 71-9341
Certificate of Compliance No. 9341
Model No. BEA Research Reactor Transportation Package

Regarding Safety Analysis Report: Cobalt-60 Production Targets
Submitted: January 2018

By application dated January 30, 2018, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18044A148), AREVA Federal Services LLC (AFS) submitted an application in accordance with Title 10 of the *Code of Federal Regulations* Part 71 (10 CFR Part 71) to amend Certificate of Compliance No. 9341 for the Model No. BRR package per the details of the submitted revision of the safety analysis report for the BRR package, Revision 11. This request for additional information identifies information needed by the U.S. Nuclear Regulatory Commission staff (the staff) in connection with its review of the application. The staff used guidance provided in NUREG-1617, "Standard Review Plan for Transportation Packages for Spent Nuclear Fuel," in its review of the application.

The question describes information needed by the staff for it to complete its review of the application and to determine whether the applicant has demonstrated compliance with regulatory requirements.

Shielding Evaluation

1. Demonstrate how the calculated dose rates for the package containing the 1 kCi source at discrete locations can be scaled up to represent a package configuration that contains different sources with varying strengths.

The applicant stated in Section 5.6.2.1 of the SAR (ADAMS Accession No. ML18044A164) that a 1 kCi Co-60 source is modeled and scaled as needed to match the Co-60 payload of the different package configurations. Source intensity, gamma energy release rate, and total source decay heat for the 1 kCi modeled Co-60 source are shown in Table 5.6-2 alongside scaled values for Type 1 and Type 2 payloads. However, the configurations are not uniform. Therefore, it is not clear to the staff how the scaling is performed for the non-uniform source configuration.

The staff requests that the applicant provide an explanation, with justification, on how the model using a 1 kCi source can be scaled up when the source is not uniform.

This information is needed to verify compliance with the external dose rate regulations in 10 CFR 71.47 and 10 CFR 71.51(a)(2).