

RDM-08-017 November 4, 2008

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CERTIFIED MAIL RETURN RECEIPT REQUESTED

U.S. Nuclear Regulatory Commission, ATTN: Pierre Saverot, Project Manager Licensing Branch, Division of Spent Fuel Storage and Transportation, Office of Nuclear Material Safety and Safeguards, Washington, DC 20555-0001

Subject: Request for Renewal of Certificate of Compliance No. 71-9252 for the Model No. 51032-2 Package.

Reference:

1) AREVA NP Inc, Letter to NRC dated September 29, 2008, Request for Renewal of Certificate of Compliance No. 71-9252 for the Model No. 51032-2 Package.

2) AREVA NP Inc, Letter to NRC dated October 28, 2008, Consolidated Safety Analysis Report (SAR) for the 51032-2 PWR Fuel Shipping Package

Dear Mr. Saverot:

AREVA NP Inc. hereby submits the attached page changes to Revision 5 of the consolidated Safety Analysis Report (SAR) previously submitted as Reference 2. Pages 6-13 and 6-14, which define the fuel assembly parameters for transport in the 51032-2 package, were further revised to be consistent with the currently licensed parameters as opposed to the consolidated fuel parameters proposed in Reference 2.

Included within this submittal are the following documents:

- Three (3) paper copies of the page changes to the consolidated Safety Analysis Report (SAR) for the 51032-2 Packages (Attachment A).
- One copy is also being sent to the NRC Document Control Desk.

Revised sections and/or page changes are provided with revision bars in the right page margin. In addition, a summary description of the nature of page changes is provided with a further description of the sections and/or page changes.

If you or your staff have any questions, require additional information, or wish to discuss the matter further, please contact me at 434-832-5172. Please reference the unique document identification number in any correspondence concerning this letter.

#### AREVA NP INC. An AREVA and Slemons company

3315 Old Forest Road, P.O. Box 10935, Lynchburg, VA 24506-0935 Tel.: (434) 832-3000 - Fax: (434) 832-3840

RDM-08-017 November 4, 2008

FORM: 22709VA-1 (4/1/20

Sincerely,

Richard Omontyp

Richard D. Montgomery, Advisory Engineer Nuclear Criticality Safety & Shipping Containers

Cc:

Document Control Desk Spent Fuel Project Office Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001

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#### AREVA NP Inc

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# Attachment A

Paper Copy Page Changes 51032-2 Package Safety Analysis Report (SAR)

## AREVA NP INC. An AREVA and Slemens company

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FORM: 22709VA-1 (4/1/2006)

# **Record of Revisions**

Revision 5 – October 2008

# Nature of Changes

Item Paragraph or Page(s)		Description and Justification				
1	Table 1-1	Revised table to convert load calculation use of percentages to fractions and added CE fuel designs. Added footnotes to identify the basis for the indicated values				
2	Section 1.2.3	Changed payload weight from 3,400 to 3,300 consistent with Section 2.0 and CoC				
3	Section 1.3	Revised drawings list				
4	Section 1.3	<ul> <li>Continued use of the existing fleet granted under 10CFR71.19(b prohibits fabrication of new packages. Therefore, the followind drawings were revised to update requirements for repair ar continued use with elimination of prior fabrication and produce quality requirements. Also, Mil-Standard welding changed AWS or ASME.</li> <li>1215926C-01 changed to 02-1215926C-002 (Revision 2) 1215929D-02 changed to 02-1215929D-003 (Revision 3) 1215930D-02 changed to 02-1215930D-003 (Revision 3) 1215931D-02 changed to 02-1215931D-003 (Revision 3) 1215932D-02 changed to 02-1215932D-003 (Revision 3) 1215933D-02 changed to 02-1215932D-003 (Revision 3) 1215934C-01 changed to 02-1215934C-002 (Revision 2) 1215935D-02 changed to 02-1215934C-002 (Revision 3)</li> </ul>				
5	Section 6.0 / Pgs 6-i & 6-ii	Added table contents for Section 6.0				
6	Section 6.0 / Pgs 6-1 & 6-2	Revised discussion regarding acceptability of fuel designs authorized in the 51032-1. Standardized CSI to 1.0 for all fuel designs				
7	Section 6.0 / Pgs 6-11 & 6-12	Moved and updated reference list from first page				
8	Section 6.0 / Pg 6-13	Table 6.1-A revised to identify only current designs with standardization consistent with 51032-1 and modeled parameters				
9	Section 6.0 / Pg 6-14	Table 6.1-B added to identify acceptable fuel designs authorized in the 51032-1 that are also applicable for the 51032-2				
10	Section 6.0 / Pg 6-56	Added Appendix 6.8 for reference justification of fuel designs authorized in the 51032-1				
11	Section 7.0	Revised to update to current requirements				
12	Section 8.0	Revised to update to current requirements				
<mark>13</mark>	Section 6.0 / Pgs 6-13 and 6-14	Tables 6.1-A and 6.1-B further updated consistent with current licensed fuel assembly parameters				

Parameter/ Assembly Type	MK-B 15x15	MK-BW 15x15	MK-C 17x17	MK-BW 17x17	
Maximum No. of Fuel Rods / Assembly	208	204	264	264	
Minimum No. of Non- Fuel Rods / Assembly	17	21	25	25	
Nominal Rod Pitch, inches	0.568	0.563	0.501	0.496	
Maximum Pellet Diameter, inches	0.3742	0.3671	0.3252	0.3232	
Nominal Cladding Maximum Outer Diameter, inches	0.430	0.422	0.379	0.374	
Nominal Cladding Minimum Outer Diameter, inches	0.377	0.370	0.332	<mark>0.326</mark>	
Nominal Fuel Assembly Envelope, inches <sup>1</sup>	8.520	8.445	8.517	8.432	
Nominal Active Fuel Stack Length, inches	144	144	144	144	
Maximum Enrichment, Wt.% <sup>235</sup> U	5.0	5.0	5.0	5.0	
Maximum Density of Active Fuel Stack Length, %TD (TD = 10.96 g UO <sub>2</sub> /cc)	97.5	97.5	97.5	97.5	

## Table 6.1-A - Fuel Assembly Parameters (51032-2)

<sup>1</sup> The nominal fuel assembly envelope is defined as the product of the rod pitch and the number of edge rods.

Parameter/ Assembly Type	W 15x15	W 17x17	GEN1 (CE 14x14, 15x15, 16x16)	L1 15x15	L2 15x15	L4 17x17
Maximum No. of Fuel Rods / Assembly	204	264	256	208	208	264
Minimum No. of Non-Fuel Rods / Assembly	21	25	0	17	17	25
Nominal Rod Pitch, inches	0.563	0.496	0.501 - 0.590	0.568	0.568	0.496
Maximum Pellet Diameter, inches	0.384	0.334	0.454	0.3707	0.3742	0.3232
Nominal Maximum Cladding Outer Diameter, inches	0.430	0.380	0.500	0.430	0.430	0.374
Nominal Minimum Cladding Outer Diameter, inches	0.410	0.355	0.260	n/a	n/a	n/a
Minimum Sum Clad Thickness and Pellet-Clad Gap, inches	0.023	0.023	0.023	<mark>0.023</mark>	0.023	0.023
Nominal Fuel Assembly Envelope, inches	8.445	8.432	8.25	8.520	8.520	8.432
Nominal Active Fuel Stack Length, inches	196	196	196	196	196	196
Maximum Enrichment, Wt.% <sup>235</sup> U	5.0	5.0	5.0	5.0	5.0	5.0
Maximum Density of Active Fuel Stack Length, %TD (TD = 10.96  g) $UO_2/cc)$	95.0	95.0	95.0	97.5	97.5	97.5

## Table 6.1-B - Fuel Assembly Parameters (51032-1 [1], Appendix 6.8 and 6.9)