

June 10, 2011 NRC:11:060

Document Control Desk U.S. Nuclear Regulatory Commission Washington, D.C. 20555-0001

Response to U.S. EPR Design Certification Application RAI No. 402, Supplement 10

In Reference 1, the NRC provided a request for additional information (RAI) regarding the U.S. EPR design certification application. AREVA NP Inc. (AREVA NP) provided a schedule for responses to all 27 questions of RAI No. 402 on August 25, 2010 (Reference 2). The schedule for two questions (RAI 402 — 09.01.01-37 and RAI 402 — 09.01.01-43) was revised in Supplement 1 (Reference 3) on September 23, 2010. The schedule for all questions was revised in Supplement 2 (Reference 4) on October 6, 2010, in Supplement 3 (Reference 5) on November 12, 2010, in Supplement 4 (Reference 6) on December 2, 2010, in Supplement 5 (Reference 7) on January 13, 2011, in Supplement 6 (Reference 8) on February 16, 2011, in Supplement 7 (Reference 9) on March 25, 2011, in Supplement 8 (Reference 10) on April 19, 2011, and in Supplement 9 (Reference 11) on May 31, 2011.

The enclosure provides a technically correct and complete final response to all 27 questions in RAI 402. Responses to some supplemental questions and issues that were transmitted via e-mail to AREVA NP on November 12, 2010 have either been embedded in these responses or included as supplemental questions at the end of the RAI 402 questions. Because AREVA believes some of the material contained in the enclosed response is proprietary, an affidavit is enclosed, as required by 10 CFR 2.390(b), to support the withholding of the information from public disclosure. In addition, an affidavit was previously submitted for the AREVA Technical Report TN-Rack.0101, U.S. EPR New and Spent Fuel Storage Technical Report, via letter NRC:09:117 on December 8, 2009 (Reference 12). This request to withhold information from public disclosure for portions of the technical report due to the inclusion of proprietary information continues to apply since markup pages from that proprietary report are included with the responses. A proprietary and non-proprietary version of this response, including markup pages from the technical report, is enclosed.

The following table indicates the respective pages in the enclosed response that contain AREVA NP's response to the subject questions.

| Question # | Start Page | End Page |
|-----------------------|------------|----------|
| RAI 402 — 09.01.01-26 | 2 | 3 |
| RAI 402 — 09.01.01-27 | 4 | 4 |
| RAI 402 — 09.01.01-28 | 5 | 5 |
| RAI 402 — 09.01.01-29 | 6 | 6 |
| RAI 402 — 09.01.01-30 | 7 | 7 |



3315 Old Forest Road, P.O. Box 10935, Lynchburg, VA 24506-0935

Tel.: 434 832 3000 www.areva.com



| Question # | Start Page | End Page |
|-----------------------|------------|----------|
| RAI 402 — 09.01.01-31 | 8 | 8 |
| RAI 402 — 09.01.01-32 | 9 | 9 |
| RAI 402 — 09.01.01-33 | 10 | 11 |
| RAI 402 — 09.01.01-34 | 12 | 15 |
| RAI 402 — 09.01.01-35 | 16 | 16 |
| RAI 402 — 09.01.01-36 | 17 | 17 |
| RAI 402 — 09.01.01-37 | 18 | 18 |
| RAI 402 — 09.01.01-38 | 19 | 20 |
| RAI 402 — 09.01.01-39 | 21 | 21 |
| RAI 402 — 09.01.01-40 | 22 | 22 |
| RAI 402 — 09.01.01-41 | 23 | 24 |
| RAI 402 — 09.01.01-42 | 25 | 27 |
| RAI 402 — 09.01.01-43 | 28 | 30 |
| RAI 402 — 09.01.01-44 | 31 | 32 |
| RAI 402 — 09.01.01-45 | 33 | 33 |
| RAI 402 — 09.01.01-46 | 34 | 34 |
| RAI 402 — 09.01.01-47 | 35 | 35 |
| RAI 402 — 09.01.01-48 | 36 | 36 |
| RAI 402 — 09.01.01-49 | 37 | 37 |
| RAI 402 — 09.01.01-50 | 38 | 38 |
| RAI 402 — 09.01.01-51 | 39 | 39 |
| RAI 402 — 09.01.01-52 | 40 | 40 |

In addition, responses to supplemental questions submitted by NRC Staff and labeled as Supplemental Information on Issues #8 - #13 are provided at the end of the RAI 402 questions on pages 41 through 48.

This concludes the formal AREVA NP response to RAI 402, and there are no questions from this RAI for which AREVA NP has not provided responses.

If you have any questions related to this submittal, please contact me by telephone at 434-832-2369 or by e-mail to sandra.sloan@areva.com.

Sincerely,

Sandra M. Sloan, Manager New Plants Regulatory Affairs

Sandra M. Sloan

AREVA NP Inc.

Enclosures

CC: Tesfaye

Docket No. 52-020

References

- Ref. 1: E-mail, Getachew Tesfaye (NRC) to Martin Bryan, et al (AREVA NP Inc.), "U.S. EPR Design Certification Application RAI No. 402(4675), FSAR Ch. 9," July 26, 2010.
- Ref. 2: E-mail, Martin C. Bryan (AREVA NP Inc.) to Getachew Tesfaye (NRC), "Response to U.S. EPR Design Certification Application RAI No. 402(4675), FSAR Ch. 9," August 25, 2010.
- Ref. 3: E-mail, Martin C. Bryan (AREVA NP Inc.) to Getachew Tesfaye (NRC), "Response to U.S. EPR Design Certification Application RAI No. 402(4675), FSAR Ch. 9, Supplement 1," September 23, 2010.
- Ref. 4: E-mail, Martin C. Bryan (AREVA NP Inc.) to Getachew Tesfaye (NRC), "Response to U.S. EPR Design Certification Application RAI No. 402(4675), FSAR Ch. 9, Supplement 2," October 6, 2010.
- Ref. 5: E-mail, Martin C. Bryan (AREVA NP Inc.) to Getachew Tesfaye (NRC), "Response to U.S. EPR Design Certification Application RAI No. 402(4675), FSAR Ch. 9, Supplement 3," November 12, 2010.
- Ref. 6: E-mail, Martin C. Bryan (AREVA NP Inc.) to Getachew Tesfaye (NRC), "Response to U.S. EPR Design Certification Application RAI No. 402(4675), FSAR Ch. 9, Supplement 4," December 2, 2010.
- Ref. 7: E-mail, Martin C. Bryan (AREVA NP Inc.) to Getachew Tesfaye (NRC), "Response to U.S. EPR Design Certification Application RAI No. 402(4675), FSAR Ch. 9, Supplement 5," January 13, 2011.
- Ref. 8: E-mail, Martin C. Bryan (AREVA NP Inc.) to Getachew Tesfaye (NRC), "Response to U.S. EPR Design Certification Application RAI No. 402(4675), FSAR Ch. 9, Supplement 6," February 16, 2011.
- Ref. 9: E-mail, Russell Wells (AREVA NP Inc.) to Getachew Tesfaye (NRC), "Response to U.S. EPR Design Certification Application RAI No. 402(4675), FSAR Ch. 9, Supplement 7," March 25, 2011.
- Ref. 10: E-mail, Russell Wells (AREVA NP Inc.) to Getachew Tesfaye (NRC), "Response to U.S. EPR Design Certification Application RAI No. 402(4675), FSAR Ch. 9, Supplement 8," April 19, 2011.
- Ref. 11: E-mail, Dennis Williford (AREVA NP Inc.) to Getachew Tesfaye (NRC), "Response to U.S. EPR Design Certification Application RAI No. 402(4675), FSAR Ch. 9, Supplement 9," May 31, 2011.
- Ref. 12: Letter, Sandra M. Sloan (AREVA NP Inc.) to Document Control Desk (NRC), "Submittal of AREVA Transnuclear Inc. Report TN-Rack.0101 –U.S. EPR New and Spent Fuel Storage Rack Technical Report," NRC:09:117, December 8, 2009.

AFFIDAVIT PURSUANT TO 10 CFR 2.390

| Transnuclear, Inc. | |) |
|--------------------|---|-----|
| State of Maryland |) | SS. |
| County of Howard | |) |

I, Jayant Bondre, depose and say that I am a Vice President of Transnuclear, Inc., duly authorized to execute this affidavit, and have reviewed or caused to have reviewed the information which is identified as proprietary and referenced in the paragraph immediately below. I am submitting this affidavit in conformance with the provisions of 10 CFR 2.390 of the Commission's regulations for withholding this information.

The information for which proprietary treatment is sought is listed below:

Response to Request for Additional Information No. 402(4675) Revision 0, 7/26/2010.

This document has been appropriately designated as proprietary.

I have personal knowledge of the criteria and procedures utilized by Transnuclear, Inc. in designating information as a trade secret, privileged or as confidential commercial or financial information.

Pursuant to the provisions of paragraph (b) (4) of Section 2.390 of the Commission's regulations, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure, included in the above referenced document, should be withheld.

- The information sought to be withheld from public disclosure involves details and analyses related to Transnuclear, Inc.'s design for new and spent fuel storage racks, which are owned and have been held in confidence by Transnuclear, Inc.
- The information is of a type customarily held in confidence by Transnuclear, Inc. and not customarily disclosed to the public. Transnuclear, Inc. has a rational basis for determining the types of information customarily held in confidence by it.
- Public disclosure of the information is likely to cause substantial harm to the competitive position of Transnuclear, Inc. because the information consists of details and analyses related to Transnuclear, Inc.'s design for new and spent fuel storage racks, the application of which provide a competitive economic advantage. The availability of such information to competitors would enable them to modify their product to better compete with Transnuclear, Inc., take marketing or other actions to improve their product's position or impair the position of Transnuclear, Inc.'s product, and avoid developing similar data and analyses in support of their processes, methods or apparatus.

Further the deponent sayeth not.

Jayant Bondre

Vice President, Transnuclear, Inc.

Subscribed and sworn to me before this 10th day of Marelling M. DOUGH.

Notary Public

My Commission Expires 10 /13 / 2018

My Commission Expires 10 /13 / 2018

My Public

bcc: N

NRC:11:060

R. D. Affolter

K. A. Bennett

F. N. Bouteille

M. S. Carpenter

J. L. Caron

D. Cofflin

K. J. Connell

G. F. Elliott

G. D. Gardner

A. E. Levin

S. McFaden

B. A. McIntyre (2)

A. Meginnis

M. J. Owens

M. V. Parece

J. Patton

P. Salas

T. E. Sliva

1. L. Oliva

S. M. Sloan

C. W. Tally

D. Williford

G. Gibson, UniStar Nuclear

W. Massie, UniStar Nuclear

P. Infanger, UniStar Nuclear Vincent Sorel, UniStar Nuclear

M. Finley, UniStar Nuclear

R. Sgarro, PPL

bcc:

NRC:11:060

R. D. Affolter

K. A. Bennett

F. N. Bouteille

M. S. Carpenter

J. L. Caron

D. Cofflin

K. J. Connell

G. F. Elliott

G. D. Gardner #85

A. E. Levin

S. McFaden

B. A. McIntyre

A. Meginnis

M. J. Owens

M. V. Parece

J. Patton

P. Salas

T. E. Sliva

S. M. Sloan

C. W. Tally

D. Williford

G. Gibson, UniStar Nuclear

W. Massie, UniStar Nuclear

P. Infanger, UniStar Nuclear

Vincent Sorel, UniStar Nuclear

M. Finley, UniStar Nuclear

R. Sgarro, PPL