



SCOTT L. BATSON
Vice President
Oconee Nuclear Station

Duke Energy
ON01VP / 7800 Rochester Hwy
Seneca, SC 29672

864-873-3274
864-873-4208 fax
Scott.Batson@duke-energy.com

ONS-2014-0157

December 8, 2014

10 CFR 72.7

ATTN: Document Control Desk
Director, Division of Spent Fuel Storage and Transportation,
Office of Nuclear Material Safety and Safeguards,
U.S. Nuclear Regulatory Commission,
Washington, DC 20555-0001

Duke Energy Carolinas, LLC
Oconee Nuclear Station Units 1, 2, and 3
Independent Spent Fuel Storage Installation (ISFSI)
Docket No. 72-40

Subject: Responses to U.S. Nuclear Regulatory Commission Request for Additional Information for Duke Energy Carolinas, LLC Exemption Request from Certain Requirements of 10 CFR 72.212(b)(3) and 72.212(b)(11) [Docket No. 72-40, TAC No. L24946]

References:

1. Duke Energy Exemption Request to Certain Requirements of 10 CFR 72.212(b)(3) and 72.212(b)(11) pursuant to 10 CFR 72.7, dated August 28, 2014.
2. NRC Certificate of Compliance for Spent Fuel Storage Casks Issued to Transnuclear, Inc., Certificate No. 1004, Standardized NUHOMS® Horizontal Modular Storage System for Irradiated Nuclear Fuel, Amendment No. 9.
3. NRC letter, "Request for Additional Information for Request for Exemption from 10CFR72.212(b)(3) and 72.212(b)(11)," dated November 3, 2014.

On August 28, 2014, Duke Energy Carolinas LLC (Duke Energy) submitted an exemption request to certain requirements of 10 CFR 72.212(b)(3) and 72.212(b)(11) pursuant to 10 CFR 72.7 (Reference 1). These regulations require, in part, compliance to the terms and conditions of the NUHOMS® Certificate of Compliance (CoC) 1004 (Reference 2). The CoC conditions require the general licensee to meet the requirements of the Technical Specifications (TS) for the NUHOMS® storage system (Attachment A to the CoC).

In this submittal Duke Energy requested a permanent exemption from the TS inner seal weld helium leak rate acceptance value for five (5) dry storage containers (DSCs) where the seal weld helium leak check had been performed using an incorrect

Enclosures 3 and 6 to this letter contain proprietary information.
Withhold From Public Disclosure Under 10 CFR 2.390.
Upon removal of Enclosures 3 and 6 this letter is uncontrolled.

NIM5526

temperature correction coefficient. The justification for the request was that the reduction in both the risk of a cask handling accident and substantial personnel exposure during cask re-test activities outweighed the risk associated with the small increase in the TS acceptance value for these containers.

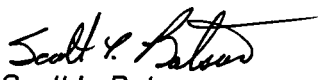
On November 3, 2014, the U.S. Nuclear Regulatory Commission (NRC) requested additional information related to this exemption request (Reference 3). The attachment to this submittal includes Duke Energy's responses to those RAI items. In addition:

- Enclosure 1 provides an affidavit, in accordance with 10 CFR 2.390, specifically requesting that the proprietary information included in Enclosure 3 and Enclosure 6 of this submittal be withheld from public disclosure. A non-proprietary version of Enclosure 3 is provided in Enclosure 4. A non-proprietary version of Enclosure 6 is not being provided as these files are entirely proprietary.
- Enclosure 2 provides Calculation Number 13922-0402, Revision 0, Helium Leak Rate Evaluation for 24PHB DSC.
- Enclosure 3 provides Calculation Number 1098-8, Revision 3, Helium Leak Testing Vent and Siphon Ports for Leak Tight NUHOMS® DSCs (Proprietary version).
- Enclosure 4 provides Calculation Number 1098-8, Revision 3, Helium Leak Testing Vent and Siphon Ports for Leak Tight NUHOMS® DSCs (Non-proprietary version).
- Enclosure 5 provides a listing of the 24 PHB leakage rates.
- Enclosure 6 provides input and output for the 24 PHB leakage rates (Proprietary).

There are no regulatory commitments contained within this submittal.

If you have any questions or require additional information, please contact Stephen C. Newman, Lead Engineer, Oconee Nuclear Station Regulatory Affairs Group, at (864) 873-4388.

Sincerely,


Scott L. Batson
Site Vice President
Oconee Nuclear Station

Attachment
7 Enclosures

Enclosures 3 and 6 to this letter contain proprietary information.
Withhold From Public Disclosure Under 10 CFR 2.390.
Upon removal of Enclosures 3 and 6 this letter is uncontrolled.

U. S. Nuclear Regulatory Commission
December 8, 2014
Page 3

cc: w/attachment/enclosures

Mr. Victor McCree
Administrator, Region II
U.S. Nuclear Regulatory Commission
Marquis One Tower
245 Peachtree Center Ave., NE, Suite 1200
Atlanta, GA 30303-1257

Robert P. Carrion, Division of Reactor Safety
U. S. Nuclear Regulatory Commission
Marquis One Tower
245 Peachtree Center Ave., NE Suite 1200
Atlanta, GA 30303-1257

Mr. James R. Hall, Senior Project Manager
(by electronic mail only)
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
11555 Rockville Pike
Mailstop O-8G9A
Rockville, MD 20852

Mr. Eddy Crowe
NRC Senior Resident Inspector
Oconee Nuclear Station

Ms. Susan E. Jenkins, Manager
Radioactive & Infectious Waste Management
SC Dept. of Health and Environmental Control
2600 Bull St.
Columbia, SC 29201

Catherine Haney, Director
Office of Nuclear Material Safety and Safeguards
U. S. Nuclear Regulatory Commission
11555 Rockville Pike
Mail Stop 14A12
Rockville, MD 20852-2738

Michele Sampson - Chief, Division of Spent Fuel Storage and Transportation
Office of Nuclear Material Safety and Safeguards
U. S. Nuclear Regulatory Commission
11555 Rockville Pike
Mail Stop 14A44
Rockville, MD 20852-2738

Enclosures 3 and 6 to this letter contain proprietary information.
Withhold From Public Disclosure Under 10 CFR 2.390.
Upon removal of Enclosures 3 and 6 this letter is uncontrolled.

U. S. Nuclear Regulatory Commission
December 8, 2014
Page 4

xc: w/attachment/enclosures (continued)

Jennifer Davis, Project Manager, Division of Spent Fuel Storage and Transportation
Office of Nuclear Material Safety and Safeguards
U. S. Nuclear Regulatory Commission
11555 Rockville Pike
Mail Stop 7F27
Rockville, MD 20852-2738

Enclosures 3 and 6 to this letter contain proprietary information.
Withhold From Public Disclosure Under 10 CFR 2.390.
Upon removal of Enclosures 3 and 6 this letter is uncontrolled.

ATTACHMENT

Duke Energy Responses to NRC Request for Additional Information (RAI)

This information is needed to determine the acceptability of an exemption from 10 CFR 72.212(b)(3) and 72.212(b)(11).

NRC RAI Item 1(a)

Provide the following information:

For each affected canister, provide a comparison table illustrating both the leakage rates with the correct and incorrect temperature correction coefficients applied.

Provide calculation(s), including the assumed ambient temperatures, illustrating how the temperature correction factor was applied to arrive at a revised leakage rate limit of 1.02×10^{-7} reference cc/ sec.

Duke Energy Response

In support of this request, please refer to the following enclosures:

- Enclosure 1 provides an affidavit, in accordance with 10 CFR 2.390, specifically requesting that the proprietary information included in Enclosure 3 and Enclosure 6 of this submittal be withheld from public disclosure. A non-proprietary version of Enclosure 3 is provided in Enclosure 4. A non-proprietary version of Enclosure 6 is not being provided as these files are entirely proprietary.
- Enclosure 2 Calculation Number 13922-0402, Revision 0, Helium Leak Rate Evaluation for 24PHB DSC.
- Enclosure 3 provides Calculation Number 1098-8, Revision 3, Helium Leak Testing Vent and Siphon Ports for Leak Tight NUHOMS® DSCs (Proprietary version).
- Enclosure 4 provides Calculation Number 1098-8, Revision 3, Helium Leak Testing Vent and Siphon Ports for Leak Tight NUHOMS® DSCs (Non-proprietary version).
- Enclosure 5 provides a listing of the 24 PHB leakage rates.
- Enclosure 6 provides input and output for the 24 PHB leakage rates (Proprietary).

NRC RAI Item 1(b)

ANSI N14.5 identifies leak-tight as 1×10^{-7} reference cc/sec and the identified revised technical specification is being identified as 1.02×10^{-7} reference cc/sec. Understanding the sensitivity of the calculations to the respective temperature correction values, in light of the worst case temperature assumption, is necessary to evaluate whether the 2% increase in the Technical Specification limit has a safety implication requiring the calculation of release fractions. At this magnitude of values, there may be no discernable difference between the two leakage rate limits, given the capabilities of the measuring instruments.

Duke Energy Response

Please refer to the response to Item 1(a).

NRC RAI Item 2

Provide the error range for the calibrated or standard leak used during the leak testing operations.

Staff is unclear as to the level of uncertainty in the measured leak testing values without complete information on the calibrated or standard leak used to provide a testing baseline.

Duke Energy Response

As stated on the calibration certificate for helium calibrated leak given in Enclosure 7, the total uncertainty in the measured leak rate of the gas leak standard is less than +/- 10%.

ENCLOSURE 1

AREVA Affidavit

**AFFIDAVIT PURSUANT
TO 10 CFR 2.390**

AREVA Inc.)
State of Maryland) SS.
County of Howard)

I, Jayant Bondre, depose and say that I am a Vice President of AREVA Inc., duly authorized to execute this affidavit, and have reviewed or caused to have reviewed the information that is identified as proprietary and referenced in the following paragraph. 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 contained in Enclosures 3 and 6, as listed below:

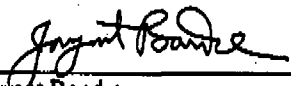
- Enclosure 3, Calculation Number 1098-8, Revision 3, Helium Leak Testing Vent and Siphon Ports for Leak Tight NUHOMS® DSC's, specific sections as identified.
- Enclosure 6, input and output for the 24 PHB leakage rates.

I have personal knowledge of the criteria and procedures utilized by AREVA 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.

- 1) The information sought to be withheld from public disclosure involves information in Calculation Number 1098-8, Revision 3 and the input and output files for the 24 PHB leakage rates, both related to the design of the NUHOMS® spent fuel storage systems, which are owned and have been held in confidence by AREVA Inc.
- 2) The information is of a type customarily held in confidence by AREVA Inc., and not customarily disclosed to the public. AREVA Inc. has a rational basis for determining the types of information customarily held in confidence by it.
- 3) Public disclosure of the information is likely to cause substantial harm to the competitive position of AREVA Inc., because the information is related to the design of spent fuel storage systems, the application of which provides a competitive economic advantage. The availability of such information to competitors would enable them to modify their product to better compete with AREVA Inc., take marketing or other actions to improve their product's position or impair the position of AREVA 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 and COO, AREVA Inc.

Subscribed and sworn to me before this 19th day of November, 2014.


Notary Public

Expires 11 / 17 / 2018

