



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

February 8, 2017

MEMORANDUM TO: Anthony Hsia, Deputy Director  
Division of Spent Fuel Management  
Office of Nuclear Material Safety  
and Safeguards

FROM: Yen-Ju Chen, Sr. Project Manager */RA/*  
Spent Fuel Licensing Branch  
Division of Spent Fuel Management  
Office of Nuclear Material Safety  
and Safeguards

SUBJECT: SUMMARY OF JANUARY 30, 2017, PRE-SUBMITTAL MEETING TO  
DISCUSS A POTENTIAL EXEMPTION AND OTHER LICENSING  
OPTIONS FOR USING THE NUHOMS® 32PTH1 DRY SHIELDED  
CANISTER UNDER CERTIFICATE OF COMPLIANCE NO. 1004 FOR  
CRYSTAL RIVER UNIT 3 NUCLEAR GENERATING PLANT

On January 30, 2017, staff from the Office of Nuclear Material Safety and Safeguards held a public pre-submittal meeting with representatives from Duke Energy and Crystal River Unit 3 Nuclear Generating Plant (CR-3) at the U.S. Nuclear Regulatory Commission (NRC) Headquarters in Rockville, MD. The purpose of the meeting was to discuss a potential exemption for using the NUHOMS® 32PTH1 dry shielded canister (DSC) under Certificate of Compliance No. 1004 for CR-3, specifically the DSC design changes associated with CR-3 independent spent fuel storage installation (ISFSI) project.

During the meeting, Duke Energy provided a summary of its decommissioning strategy, timeline, and cost. Duke Energy indicated it plans to use NUHOMS® 32PTH1 Type 2-W system for dry cask storage for CR-3 ISFSI and plans to start loading in June 2017. NRC has completed inspections on the cask handling crane and ISFSI pad.

TN-Americas, LLC (TN) made design changes to NUHOMS® 32PTH1 under Title 10 of the *Code of Federal Regulations* (10 CFR) 72.48, "Changes, tests, and experiments," and designated the new system as NUHOMS® 32PTH1 Type 2-W system. TN followed NEI-96-07, Appendix B, "Guidelines for 10 CFR 72.48 Implementation." NRC reviewed TN's analysis and had a concern that TN's thermal analysis is a departure from a method of evaluation described in the final safety evaluation report. At the meeting, TN presented its revised analysis to address NRC's concerns by using the original methodology, but different version of the model. NRC noted that TN needs to ensure using different version of model does not change any of the elements of the method, which is a departure from a method of evaluation. In addition, TN needs to ensure the revised analysis result does not exceed or alter a design basis limit, as required by 10 CFR 72.48.

CR-3 indicated that it will proceed with its current loading plan while waiting for TN's revised analysis. If there are regulatory concerns with the revised analysis, CR-3 will submit an exemption request for the use of NUHOMS® 32PTH1 Type 2-W. After completing the revised analysis, TN will provide a copy to the NRC to ensure it meets the requirements of 10 CFR 72.48. NRC noted that the review of an exemption request requires the preparation of environmental assessment and safety evaluation report, which will take at least 4 months.

The attendance list (Enclosure 1) and slides for the meeting (Enclosure 2) are enclosed.

Docket No.: 72-1035

Enclosures:

1. Attendance List
2. Presentation Slides

A. Hsia

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The attendance list (Enclosure 1) and slides for the meeting (Enclosure 2) are enclosed.

Docket No.: 72-1035

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1. Attendance List
2. Presentation Slides

**DISTRIBUTION:**

NRC attendees

G:\SFST\Crystal River\Exemption Request 2017\Pre-Submittal Meeting\Meeting Summary.docx

G:\SFST\Crystal River\Exemption Request 2017\Pre-Submittal Meeting\Enclosure 2 - Presentation Slides.pdf

**ADAMS Package No. ML17040A182 Memo: ML17040A198 Slides: ML17040A204**

**This closes out CAC L25178**

|              |        |                        |           |
|--------------|--------|------------------------|-----------|
| <b>OFC:</b>  | DSFM   | DSFM                   | DSFM      |
| <b>NAME:</b> | YChen  | WWheatley<br>Via email | JMcKirgan |
| <b>DATE:</b> | 2/2/17 | 2/3/17                 | 2/8/17    |

OFFICIAL RECORD COPY

ATTENDANCE LIST  
Pre-Submittal Meeting with Duke Energy & Crystal River  
January 30, 2017

| <u>Name</u>       | <u>Affiliation</u>    |
|-------------------|-----------------------|
| Yen-Ju Chen       | NRC/NMSS/DSFM         |
| John Hickman      | NRC/NMSS/DUWP         |
| Ray Wharton       | NRC/NMSS/DSFM         |
| Mike Call         | NRC/NMSS/DSFM         |
| Bruce Watson      | NRC/NMSS/DUWP         |
| Steve Edwards     | Duke Energy Corporate |
| Chris Nolan       | Duke Energy Corporate |
| Ryan Stephens     | Duke Energy Corporate |
| Terry Hobbs       | CR-3                  |
| Alan Fata         | CR-3                  |
| Phyllis Dixon     | CR-3                  |
| Joseph Faldowski  | TN-Americas           |
| Prakash Narayanan | TN-Americas           |
| Jibu Abraham      | TN-Americas           |
| Girish Patel      | TN-Americas           |
| Tan Trieu Pham    | TN-Americas           |
| Raheel Haroon     | TN-Americas           |
| Venkata Venigalla | TN-Americas           |
| Donis Shaw        | TN-Americas           |
| Kamran Tavasoli   | TN-Americas           |
| Jayant Boudre     | TN-Americas           |
| Benjamin Spiesman | First Energy Corp.    |

**(Participating by phone)**

|                   |                      |
|-------------------|----------------------|
| Yong Kim          | NRC/NMSS/DSFM        |
| David Tarantino   | NRC/NMSS/DSFM        |
| Jorge Solis       | NRC/NMSS/DSFM        |
| Caylee Kenny      | NRC/NMSS/DSFM        |
| John Nicholson    | NRC/R-I              |
| Briana DeBoer     | NRC/R-I              |
| Tom Lentz         | FENOC                |
| Jeffrey Fox       | FENOC                |
| J.R. Majewski     | FENOC                |
| Kathleen McIntyre | FENOC                |
| Carlyn Greene     | Backend Publications |
| Marvin Lewis      | Public               |