

June 15, 2009

MEMORANDUM TO: Nader Mamish, Deputy Director  
Licensing and Inspection Directorate  
Division of Spent Fuel Storage and Transportation, NMSS

FROM: Dr. Pamela Longmire, Project Manager /RA/  
Licensing Branch  
Division of Spent Fuel Storage and Transportation, NMSS

SUBJECT: SUMMARY OF MAY 7, 2009, PUBLIC MEETING WITH NORTHERN  
STATES POWER COMPANY – MINNESOTA (NSPM) (XCEL  
ENERGY), FORMERLY NUCLEAR MANAGEMENT COMPANY,  
LLC, AND TRANSNUCLEAR (TN) REGARDING PRELIMINARY  
RESPONSES TO REQUESTS FOR ADDITIONAL INFORMATION  
ON THE TN-40HT LAR

### Background

By letter dated March 28, 2008, supplemented August 29, 2008, Nuclear Management Company, LLC (NMC), now Northern States Power Company – Minnesota (NSPM) (Xcel Energy), submitted an application to amend Special Nuclear Material License No. 2506 and the license Technical Specifications (TS) for the Prairie Island Independent Spent Fuel Storage Installation (PI ISFSI) in accordance with 10 CFR Part 72 (ML081400652). This amendment proposes to modify the TN-40 cask for storage of high enrichment and high burnup fuel and to reformat the TS. TN-40HT is the designation for the modified cask design. The TN-40HT is similar in design to the TN-40 with the following major exceptions: 1) dose rate limits; 2) criteria for fuel selection; 3) helium backfill pressures; 4) difference in lid-bolt torque; and 5) fuel basket design, which is similar to the TN-68. Xcel Energy asserted previously that the differences in the two designs would minimally impact the existing fuel loading and transfer operations.

### Discussion

A public meeting was held on May 7, 2009, between Northern States Power Company – Minnesota (NSPM) (Xcel Energy) and TransNuclear (TN) representatives, and NRC staff. The purpose of the meeting was to discuss NSPM's preliminary responses to the staff's requests for additional information (RAIs) on the TN-40HT license amendment request submitted on March 28, 2008 (ML081190039).

NSPM representatives discussed preliminary responses to proprietary RAI (ML090840038) A1.1, A1.2, A4.4, A4.5, and A4.6; no handout was provided for these responses. NSPM then discussed preliminary responses for all non-proprietary RAI (ML090840028) with the exception of responses to RAI A4.4, A4.5, A8.1, M8, and M10 for which preliminary responses had not been prepared. The discussion was based on the meeting handout provided by NSPM which showed the direct answer to the question and changes to applicable application documents (such as the Technical Specifications (TS), TS Bases or ISFSI Safety Analysis Report (SAR))

as appropriate. The discussion was separated into subject areas of revised TS, materials, principal cask criteria, storage system, structural analysis of the basket, storage operation, radiation protection and dose analysis. Proposed approaches for responding to some of the RAIs for which preliminary responses were not provided were also discussed.

During discussion of the proposed TS, it was noted that the PI ISFSI has a site specific license which may be a basis for some TS differences. General comments were provided on the preliminary RAI responses such as: provide ADAMS accession numbers when available; update application documents with RAI response information if applicable; and provide the sources of information used to support RAI responses. Many specific comments directed at a particular RAI response were also provided.

The usefulness of a future meeting to discuss preliminary responses to RAI A4.4, A4.5, A8.1, M8, and M10, which were not ready to be discussed in this meeting, was explored, but no decision was made.

Both, the presentation slides and the meeting handouts are provided as enclosures to this meeting summary. The meeting agenda and list of attendees is also provided.

This was a Category 1 public meeting where the public had been invited to observe this meeting and have an opportunity to communicate with the NRC after the business portion, but before the meeting was adjourned. There were no members of the public in attendance at this meeting. The staff did not make any regulatory commitments at the meeting.

Docket No. 72-10  
TAC No. L24203

Enclosures:

1. Meeting Agenda
2. Meeting Attendees
3. Meeting Handouts
4. Meeting Presentation Slides

as appropriate. The discussion was separated into subject areas of revised TS, materials, principal cask criteria, storage system, structural analysis of the basket, storage operation, radiation protection and dose analysis. Proposed approaches for responding to some of the RAIs for which preliminary responses were not provided were also discussed.

During discussion of the proposed TS, it was noted that the PI ISFSI has a site specific license which may be a basis for some TS differences. General comments were provided on the preliminary RAI responses such as: provide ADAMS accession numbers when available; update application documents with RAI response information if applicable; and provide the sources of information used to support RAI responses. Many specific comments directed at a particular RAI response were also provided.

The usefulness of a future meeting to discuss preliminary responses to RAI A4.4, A4.5, A8.1, M8, and M10, which were not ready to be discussed in this meeting, was explored, but no decision was made.

Both, the presentation slides and the meeting handouts are provided as enclosures to this meeting summary. The meeting agenda and list of attendees is also provided.

This was a Category 1 public meeting where the public had been invited to observe this meeting and have an opportunity to communicate with the NRC after the business portion, but before the meeting was adjourned. There were no members of the public in attendance at this meeting. The staff did not make any regulatory commitments at the meeting.

Docket No. 72-10  
TAC No. L24203

Enclosures:

1. Meeting Agenda
2. Meeting Attendees
3. Meeting Handouts
4. Meeting Presentation Slides

Distribution: SFST r/f NMSS r/f NRC Attendees BWhite

G:\SFST\Longmire\Prairie Island ISFSI\Meeting Summary 05072009.doc  
G:\SFST\Longmire\Prairie Island ISFSI\Meeting Handouts 05072009.doc  
G:\SFST\Longmire\Prairie Island ISFSI\Meeting Presentation Slides 05072009.ppt

| OFC  | E          |           |           |  |  |
|------|------------|-----------|-----------|--|--|
| NAME | P Longmire | EBenner   | WWheatley |  |  |
| DATE | 6/12/2009  | 6/15/2009 | 6/15/2009 |  |  |

C = Without attachment/enclosure E = Without attachment/enclosure N = No copy

**OFFICIAL RECORD COPY**

## Meeting Agenda

### **Morning Session:**

9:00 am      Introductions  
9:05 am      Purpose of Meeting  
9:10 am      Proprietary RAI A1.1, A1.2, A4.4, A4.5, A4.6 [Closed to the public]  
9:30 am      Revised Technical Specifications – RAI ATT 1.1, ED-3, & Other  
9:45 am      Materials – RAI M1 through M19  
10:45 am      Break  
11:00 am      Principal Cask Criteria – RAI A3.1 through A3.4, & ED-1  
11:15 am      Storage System – RAI A4.1 through A4.3  
11:30 am      Structural analysis of Basket – RAI A4B.1 through A4B.3  
11:45 am      Plans for A8.1

### **Afternoon Session:**

1:00 pm      Storage System Operation – A5.1  
1:10 pm      Radiation Protection – RAI A7.2, A7.5, & A7.6  
1:30 pm      Plans for RAI A7.1, A7.3, & A7.4  
1:45 pm      Dose Analysis – RAI A7A.1 through A7A.5, & ED-2  
2:30 pm      Break  
2:45 pm      RAI Questions Placed in Parking Lot during Meeting  
3:00 pm      Adjourned

**Meeting Between NSPM, TN, and the  
Nuclear Regulatory Commission  
May 7, 2009  
Meeting Attendees**

|                        |           |
|------------------------|-----------|
| Pamela Longmire, Ph.D. | NMSS/SFST |
| JoAnn Ireland          | NMSS/SFST |
| David Tang             | NMSS/SFST |
| David Tarantino        | NMSS/SFST |
| Bob Einziger           | NMSS/SFST |
| Eric Benner            | NMSS/SFST |
| Dan Forsyth            | NMSS/SFST |
| Chris Bajwa            | NMSS/SFST |
| Larry Campbell         | NMSS/SFST |
| Natreon Jordan         | NMSS/SFST |
| Kellee Jamerson        | NMSS/FSME |
| Roy Waterman           | NSPM      |
| S. Lee Samson          | NSPM      |
| Herbert O. Nelson      | NSPM      |
| Dale Vincent           | NSPM      |
| Kamran Tavassoli       | TN        |
| Peter Shih             | TN        |
| Prakash Narayanan      | TN        |

No members of the public were in attendance.