

June 4, 2014

MEMORANDUM TO: Anthony Hsia, Ph.D., Deputy Director  
Division of Spent Fuel Storage and Transportation, NMSS

FROM: Pamela Longmire, Ph.D., Project Manager **/RA/ B. J. Davis For**  
Licensing Branch  
Division of Spent Fuel Storage and Transportation, NMSS

SUBJECT: SUMMARY OF MAY 14, 2014, MEETING WITH XCEL ENERGY  
REGARDING PROPOSED EXEMPTION REQUEST FOR DRY  
STORAGE CANISTERS AT MONTICELLO NUCLEAR  
GENERATING PLANT

### Background

A public meeting was held on May 14, 2014, in Rockville, MD, at the request of Northern States Power, a Minnesota corporation, d/b/a Xcel Energy to discuss the planned submittal of an exemption request for inoperable dry shield canisters (DSC, 11-16) at the Monticello Nuclear Generating Plant (MNGP). On October 17, 2013, during Monticello's dry cask loading campaign an NRC resident inspector observed DSC 16 being processed by video and identified that the dwell times for dye penetrant (PT) examination of welds did not comply with technical specification 1.2.5 of the NUHOMS® 61-BTH Certificate of Compliance No. 1004, Amendment No. 10. Xcel Energy's Nuclear Oversight (NOS) group completed a review of test and welding videos and documents. Areva-TN provided technical support to Xcel Energy.

The meeting was noticed on May 2, 2014. The Agencywide Documents Access and Management System (ADAMS) accession number for the meeting notice is ML14121A576. The meeting agenda is provided as Enclosure 1. The meeting attendance list is provided as Enclosure 2. The handout from the public meeting is provided as Enclosure 3.

### Discussion

Discussions at the meeting focused on the proposed exemption request and the technical assessment of MNGP's non-compliance status. Xcel Energy proposes to submit an exemption request with two phases. Phase 1 would involve moving DSC 16 (as soon as possible) and Phase 2 would address the long term storage for DSCs 11-16.

Staff questioned the packaging of the exemption. Staff questioned the process, procedures, and tools utilized and approved for use at the MNGP. The specific question dealt with how an approved procedure (visual inspection) could be used for the second inspection when its use for the first inspection was inadequate. NRC staff questioned the justification for the inner weld acceptability. NRC staff questioned the derivation of the allowable reduction for penalty with no PT. Dose estimates were questioned and NRC staff wants to see the dose estimates specified in the exemption request.

Per Xcel Energy's discussion, PT testing was recorded in accordance with their corrective action plan (CAP) and the review captured in a report by their NOS group. The NOS report

summarizes procedures of other compliance test done on the DSC. The Structural Integrity Associates (SIA) report evaluates the welding process and practice. Xcel Energy stated that all non-conformances have been documented and the reports can be sent in with the exemption request.

Xcel Energy presented two alternatives, removing the spent fuel from the DSC or removing the outer top cover plate and reworking the welds. Both of these alternatives involve cutting the DSCs open, a first of a kind evolution. Xcel Energy stated that removing the inner top cover plate is a precise job and a lot of dose is expected. NRC staff stated that removing the outer top cover and evaluating the welds on the inner top cover would allow Xcel Energy to gather information by inspecting the welds and would give more evidence for the exemption. Xcel Energy stated that cutting the top cover plate could damage the inner top cover as well as the shell and potentially destroy the whole unit. The discussion also covered the prospects of unloading the fuel. Xcel Energy stated the latter is difficult because it is a precision job and could potentially introduce contaminants/particulates in the spent fuel pool and compromise its purity.

DSC 16 is in the transfer cask (TC) on the reactor building refuel floor. Xcel Energy made it clear that DSC 16 will not be moved until an exemption is granted. Additionally, Xcel Energy stated that the space in the refueling building will be needed for staging and receipt of new fuel in January 2015. Thus, the time frame Xcel Energy wants to move DSC 16 is in the September to October time frame. Minnesota's weather conditions were cited in their justification for October being the most opportune time to transfer DSC 16 to the horizontal storage module (HSM) before winter. The NRC staff informed Xcel Energy that the processing time for an exemption request could take a year. NRC staff also commented that moving DSC 16 to the HSM prior to being granted an exemption would be done at risk.

The meeting was attended via phone by representatives from Xcel Energy, Areva-TN, Minnesota Department of Commerce (Division of Energy Resources), and Ux Consulting. The public had no questions or comments.

The staff did not make any regulatory commitments at the meeting.

Docket No. 72-58  
TAC No. L24915

Enclosures:

1. Meeting Agenda
2. List of Meeting Attendees
3. Meeting Slides

summarizes procedures of other compliance test done on the DSC. The Structural Integrity Associates (SIA) report evaluates the welding process and practice. Xcel Energy stated that all non-conformances have been documented and the reports can be sent in with the exemption request.

Xcel Energy presented two alternatives, removing the spent fuel from the DSC or removing the outer top cover plate and reworking the welds. Both of these alternatives involve cutting the DSCs open, a first of a kind evolution. Xcel Energy stated that removing the inner top cover plate is a precise job and a lot of dose is expected. NRC staff stated that removing the outer top cover and evaluating the welds on the inner top cover would allow Xcel Energy to gather information by inspecting the welds and would give more evidence for the exemption. Xcel Energy stated that cutting the top cover plate could damage the inner top cover as well as the shell and potentially destroy the whole unit. The discussion also covered the prospects of unloading the fuel. Xcel Energy stated the latter is difficult because it is a precision job and could potentially introduce contaminants/particulates in the spent fuel pool and compromise its purity.

DSC 16 is in the transfer cask (TC) on the reactor building refuel floor. Xcel Energy made it clear that DSC 16 will not be moved until an exemption is granted. Additionally, Xcel Energy stated that the space in the refueling building will be needed for staging and receipt of new fuel in January 2015. Thus, the time frame Xcel Energy wants to move DSC 16 is in the September to October time frame. Minnesota's weather conditions were cited in their justification for October being the most opportune time to transfer DSC 16 to the horizontal storage module (HSM) before winter. The NRC staff informed Xcel Energy that the processing time for an exemption request could take a year. NRC staff also commented that moving DSC 16 to the HSM prior to being granted an exemption would be done at risk.

The meeting was attended via phone by representatives from Xcel Energy, Areva-TN, Minnesota Department of Commerce (Division of Energy Resources), and Ux Consulting. The public had no questions or comments.

The staff did not make any regulatory commitments at the meeting.

Docket No.: 72-58

TAC No.: L24915

Enclosures:

1. Meeting Agenda
2. List of Meeting Attendees
3. Meeting Slides

Distribution: SFST r/f NRC Attendees Glrani

File location: G:\SFST\Monticello\Meeting Summary May 2014.docx

G:\SFST\Monticello\Presubmittal slides.pdf

**ADAMS Package No.: ML14156A019 Memo No.: ML14156A023**

OFC	SFST	E	SFST	SFST
NAME	PLongmire		WWheatley	JNguyen for MSampson
DATE	05/28/2014		05/29/2014	06/04/2014

C=Without attachment/enclosure

E=With attachment/enclosure

N=No copy

**OFFICIAL RECORD COPY**

**AGENDA**

Meeting with Xcel Energy

May 14, 2014

1:00 p.m. – 4:00 p.m.

3WFN 6-A-39

Purpose: To discuss a proposed exemption request for inoperable dry shield canisters (11-16) at the Monticello Nuclear Generating Plant.

Welcome and Introductions	NRC
Purpose of Meeting	NRC
Background	Xcel Energy
Requested Exemption	Xcel Energy
Technical Assessment	Xcel Energy
Alternatives Examined	Xcel Energy
Environmental Consideration	Xcel Energy
Schedule	Xcel Energy
Open Discussion	NRC and Xcel Energy
Opportunity for Public Comments	NRC
Wrap Up and Closing Remarks	NRC and Xcel Energy
Adjourn	

**Meeting Between Xcel Energy  
and the Nuclear Regulatory Commission  
May 14<sup>th</sup> Meeting Attendees**

NRC/NMSS

Cathy Haney	Director, Office of Nuclear Material Safety and Safeguards
Mark Lombard	Director, Division of Spent Fuel Storage and Transportation
Anthony Hsia	Deputy Director, Division of Spent Fuel Storage and Transportation
Terry Beltz	Senior Project Manager, Office of Nuclear Reactor Regulations
Aladar Csontos	Branch Chief, Structural Mechanical & Materials Branch
Christian Araguas	Branch Chief, Thermal and Containment Branch
Michele Sampson	Branch Chief, Licensing Branch
Joe Donoghue	Branch Chief, Rules, Operations & Inspections Branch
Eben Allen	Project Manager, Rules, Operations & Inspections Branch
Darrel Dunn	Structural Mechanical & Materials Branch
Jimmy Chang	Thermal and Containment Branch
David Tang	Structural Mechanical & Materials Branch
Jennifer Davis	Project Manager, Licensing Branch
Clyde Morell	Weld Expert, Rules Operations & Inspections Branch
Chris Allen	Project Manager, Licensing Branch
Pamela Longmire	Project Manager, Licensing Branch

NRC/R-III

Patrick Loudon	Director, Division of Nuclear Material Safety
Jack Giessner	Deputy Director, Division of Nuclear Material Safety
Rhex Edwards	Inspector, Materials Containment-ISFSI & Decommissioning

Xcel Energy

Mark Schimmel	Vice President
Marty Murphy	Director, Nuclear Licensing and Regulatory Services
Lee Samson	Manager, Spent Nuclear Fuel Project
John Fields	Lead Licensing Engineer
Mike Bauman	Director, Nuclear Fuel Supply
Aldo Capristo	Vice President, Nuclear Licensing and Common Services
Michael O'Donnell	ISFSI Project Engineer
Mark Lingenfelter	Engineering Director

AREVA TN

Jayant Bondre	Chief Operating Officer
Peter Quinlan	Project Engineer
Don Shaw	Director, Regulatory Services
Jayant Bondre	Vice President and Chief Operating Officer
Sunita Kumar	Account Manager
James Brown	Fabrication Control Project Engineer

Called In

Carlyn Greene	Executive Director, Ux Consulting
Matthew Learn	Inspector, Materials Containment-ISFSI & Decommissioning
Jeremy Tapp	Project Manager, Rules, Operations & Inspections Branch
Ray Wharton	Senior Project Manager, Rules, Operations & Inspections Branch

Earl Love	Safety Inspection Engineer, Rules, Operations & Inspections Branch
Rob Temps	Safety Inspection Engineer, Rules, Operations & Inspections Branch
Tom Hitland	Xcel Energy
Jim Becka & Team	Monticello ISFSI Project
Michael Williams	Director, Field Services and Operation, Areva TN
Bob Orlikowski	Branch Chief, Materials Containment-ISFSI & Decommissioning
Harral Logaras	NRC, Regional Government Liaison Specialist, Region III
Paul Zurawski	NRC Resident Inspector, Monticello Nuclear Generating Plant
Tom Hoen	Media Relations, Xcel Energy
Jason Pearce	Monticello Control Room Supervisor, Xcel Energy
Jeffery Gagne	Senior Project Manager, Areva TN
Steve Rakow	Minnesota Department of Commerce, Division of Energy Resources

# **PRESENTATION SLIDES**