



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

December 30, 2013

LICENSEE: Northern States Power Company of Minnesota

FACILITY: Monticello Nuclear Generating Plant

SUBJECT: SUMMARY OF THE DECEMBER 4, 2013, PUBLIC MEETING WITH
NORTHERN STATES POWER COMPANY OF MINNESOTA (NSPM) TO
DISCUSS FUTURE LICENSE AMENDMENT APPLICATION REGARDING USE
OF AREVA ATRIUM 10XM FUEL IN EXTENDED FLOW WINDOW OPERATING
DOMAIN (TAC NO. MF3084)

On December 4, 2013, the U.S. Nuclear Regulatory Commission (NRC) staff held a Category 1 public meeting with representatives of NSPM, doing business as Xcel Energy (the licensee), and AREVA, at NRC headquarters. The purpose of the meeting was for the licensee to discuss its fuel transition plan related to a future license amendment application regarding use of AREVA Atrium 10XM fuel in the extended flow window (EFW) operating domain for the Monticello Nuclear Generating Plant (Monticello), and the integrated schedule for fuel transition initiatives. The objective of the meeting was for NSPM to provide the NRC staff with an understanding of the proposed scope of the EFW license amendment request, to solicit staff concerns and comment, and to assist the staff in better understanding future schedule and resource loading. The Enclosure to this meeting summary contains the list of participants.

The licensee's presentation followed handout material (docketed at Agencywide Documents Access and Management System (ADAMS) Accession No. ML13358A074) that was provided during the meeting. A non-proprietary version of the handout material can be found at ADAMS Accession No. ML13358A071. The licensee indicated that they would likely be submitting their license amendment request to the NRC in the spring of 2014, and requesting approval towards the end of calendar year 2016 (prior to Refueling Outage 28) to support full power operation with AREVA Atrium 10XM fuel commencing during Cycle 29 in 2017.

The NRC staff provided the following comments during the meeting:

1. The EFW license amendment request should be submitted under the envelope approved for future Monticello Maximum Extended Load Line Limit Analysis Plus (MELLLA+) operation.
2. The AREVA EFW methodology is just a method to be used for stability solution. There are no details for plant-specific implementation. As such, the gap needs to be bridged for items such as software and hardware instrumentation and control; setpoint calculations; and calibration/accuracy for operator response actions.
3. ATWS-I methods (AISHA and SINANO) should be described fully in terms of assumptions, data collection, dryout model used, uncertainty, code validation and verification process, etc.

4. Details of implementation of the Enhanced Option III (EO-III) Long-Term Stability Protection should be linked to the technical specification surveillance requirements.
5. The diversity of the EO-III system should be addressed.
6. Issues pertaining to mixed-core operation should be addressed.

The NRC staff understood Xcel Energy's phased approach toward transitioning to AREVA fuel and use of the EFW operating domain. There was no comment from the staff rejecting this approach. The NRC staff indicated that it would need to balance personnel resources to accommodate the review and proposed schedule, and NSPM indicated that it would need to do the same. The NRC staff advised the licensee to continue to keep communication channels open between now and submittal of the application, and that the staff would notify the licensee of any subsequent additional concerns.

There was one member of the public in attendance on the telephone. Portions of the meeting were closed to the public because proprietary information was being discussed. Before the meeting adjourned, all meeting participants were given the opportunity to comment on any aspects of the meeting.

Mrs. Ruth Thomas had the following questions (responses from the NRC staff and AREVA are provided):

1. What U.S. reactors are currently using AREVA fuel? Brunswick Steam Electric Plant and LaSalle County Station are boiling water reactors using AREVA fuel.
2. So these plants are currently using AREVA fuel? Yes
3. Did they previously use General Electric fuel? Yes
4. Is this fuel being used in France? No
5. Is AREVA fuel used in pressurized water reactors? No
6. Has AREVA fuel been tested and tried at Monticello? Monticello plans to use the fuel at the site, but it will not be tested prior to use. As previously indicated, AREVA fuel has been in use at other facilities and demonstrated satisfactory operation.

No additional feedback regarding the meeting was provided.

Please direct any inquiries to me at 301-415-3049 or e-mail terry.beltz@nrc.gov.

Robert D. Carl
For Terry A. Beltz, Senior Project Manager
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-263

Enclosure: List of participants

cc w/encl: Distribution via ListServ

LIST OF PARTICIPANTS

MEETING BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION

AND NORTHERN STATES POWER COMPANY OF MINNESOTA (NSPM)

TO DISCUSS THE PROPOSED LICENSE AMENDMENT

TO TRANSITION TO AREVA ATRIUM 10XM FUEL IN THE EXTENDED FLOW WINDOW

MONTICELLO NUCLEAR GENERATING PLANT

<u>NAME</u>	<u>ORGANIZATION</u>
Glenn Adams	NSPM
Steve Bajorek	NRC/RES/DSA ¹
Michael Baumann	NSPM
Terry Beltz	NRC/NRR/DORL/LPL3-1 ²
Joel Beres	NSPM
Robert Carlson	NRC/NRR/DORL/LPL3-1 ²
Paul Clifford	NRC/NRR/DSS ³
Gene Eckholt	NSPM
John Fields	NSPM
Ashley Guzzetta	NRC/NRR/DSS/SRXB ⁴
Chris Jackson	NRC/NRR/DSS/ SRXB ⁴
Hank Hoelscher	NSPM
Tai Huang	NRC/NRR/DSS/ SRXB ⁴
Alan Meginnis	AREVA
Martin Murphy	NSPM
Mathew Pannicker	NRC/NRR/DSS/SNPB ⁵
Benjamin Parks	NRC/NRR/DSS/SRXB ³
Robert Schnepp	AREVA
Daniel Tinkler	AREVA
Ryan Welch	AREVA
Peter Yarsky	NRC/RES/DSA/RSAB ⁶

The following participated by telephone:

Timothy Byam	Exelon
Ralph Grummer	AREVA
Jerry Ingham	AREVA
Ruth Thomas	Environmentalists Incorporated

¹ Office of Nuclear Regulatory Research, Division of Systems Analysis

² Office of Nuclear Reactor Regulation, Division of Operating Reactor Licensing, Plant Licensing Branch III-1

³ Office of Nuclear Reactor Regulation, Division of Safety Systems

⁴ Office of Nuclear Reactor Regulation, Division of Safety Systems, Reactor Systems Branch

⁵ Office of Nuclear Reactor Regulation, Division of Safety Systems, Nuclear Performance & Code Review Branch

⁶ Office of Nuclear Regulatory Research, Division of Systems Analysis, Reactor Systems Analysis Branch

Enclosure

Please direct any inquiries to me at 301-415-3049 or e-mail terry.beltz@nrc.gov.

/RA/ Robert D. Carlson for

Terry A. Beltz, Senior Project Manager
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-263

Enclosure: List of participants

cc w/encl: Distribution via ListServ

DISTRIBUTION:

PUBLIC LPL3-1 R/F
RidsNrrDorLpl3-1 Resource
RidsNrrLAMHenderson Resource
RidsNrrPMMonticello Resource
RidsRgn3MailCenter Resource
RidsAcrsAcnw_MailCTR Resource

RidsOgcRp Resource
B. Reilly, R-III
C. Jackson, NRR
S. Whaley, NRR
P. Clifford, NRR
S. Bajorek, RES

B. Parks, NRR
A. Guzzetta, NRR
T. Huang, NRR
M. Panicker, NRR
A. Proffitt, NRR
P. Yarsky, RES

ADAMS Accession Numbers:

Package: ML13358A076

Meeting Notice: ML13322A009

Meeting Summary: ML13351A342

Licensee's Presentation (non-proprietary): ML13358A071

Licensee's Presentation (proprietary): ML13358A074

OFFICE	LPL3-1/PM	LPL3-1/LA	SRXB/BC	SNPB/BC(A)	LPL3-1/BC
NAME	TBeltz (SWall for)	MHenderson	CJackson	JDean	RCarlson
DATE	12/30/13	12/30/13	12/30/13	12/30/13	12/30/13

OFFICIAL RECORD COPY