

NRR-PMDAPEm Resource

From: Beltz, Terry
Sent: Monday, April 22, 2013 2:47 PM
To: 'Adams, Glenn D.'
Cc: gene.eckholt@xenuclear.com; Carlson, Robert; Hunt, Christopher; Wong, Emma; Yoder, Matthew
Subject: Monticello Nuclear Generating Plant - Requests for Additional Information re: License Amendment Request to Support Fuel Storage Changes (TAC No. ME9893)
Attachments: Monticello - Fuel Storage Change LAR - ESGB Requests for Additional Information (TAC No. ME9893).docx

Dear Mr. Adams:

By letter dated October 30, 2012 (Agencywide Documents Access and Management System Accession No. ML12307A433), Northern States Power Company – Minnesota (NSPM), doing business as Xcel Energy, Inc., submitted a license amendment request to revise the Monticello Nuclear Generating Plant Technical Specifications to support fuel storage system changes and a revised criticality safety analysis that addresses legacy fuel types and new fuel designs.

The U.S. Nuclear Regulatory Commission (NRC) staff in the Steam Generator Tube Integrity and Chemical Engineering Branch (ESGB) of the Office of Nuclear Reactor Regulation is currently reviewing your submittal. The ESGB staff has determined that additional information is required to complete its review, and provided you with draft requests for additional information (RAIs).

The NRC staff discussed the contents of the draft RAIs with NSPM and AREVA in a teleconference on April 22, 2013. The purpose of the teleconference was to provide additional clarification and ensure understanding of the RAIs. The final RAIs are attached.

At the conclusion of the teleconference, it was agreed that you would provide a response within 30 days. As such, please provide your response to the attached RAIs no later May 24, 2013.

Please let me know if you have any questions or concerns.

Sincerely,

*Terry A. Beltz, Senior Project Manager
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation
(301) 415-3049
Terry.Beltz@nrc.gov*

Hearing Identifier: NRR_PMDA
Email Number: 672

Mail Envelope Properties (Terry.Beltz@nrc.gov20130422144700)

Subject: Monticello Nuclear Generating Plant - Requests for Additional Information re:
License Amendment Request to Support Fuel Storage Changes (TAC No. ME9893)
Sent Date: 4/22/2013 2:47:16 PM
Received Date: 4/22/2013 2:47:00 PM
From: Beltz, Terry

Created By: Terry.Beltz@nrc.gov

Recipients:

"gene.eckholt@xenuclear.com" <gene.eckholt@xenuclear.com>

Tracking Status: None

"Carlson, Robert" <Robert.Carlson@nrc.gov>

Tracking Status: None

"Hunt, Christopher" <Christopher.Hunt@nrc.gov>

Tracking Status: None

"Wong, Emma" <Emma.Wong@nrc.gov>

Tracking Status: None

"Yoder, Matthew" <Matthew.Yoder@nrc.gov>

Tracking Status: None

"Adams, Glenn D." <Glenn.Adams@xenuclear.com>

Tracking Status: None

Post Office:

Files	Size	Date & Time
MESSAGE	1612	4/22/2013 2:47:00 PM
Monticello - Fuel Storage Change LAR - ESGB Requests for Additional Information (TAC No. ME9893).docx	20331	

Options

Priority: Standard

Return Notification: No

Reply Requested: No

Sensitivity: Normal

Expiration Date:

Recipients Received:

REQUEST FOR ADDITIONAL INFORMATION
REGARDING MONTICELLO NUCLEAR GENERATING PLANT
LICENSE AMENDMENT REQUEST SUPPORTING SPENT FUEL STORAGE CHANGES
SPENT FUEL POOL NEUTRON ABSORBING MATERIAL - BORAL
NORTHERN STATES POWER COMPANY – MINNESOTA
MONTICELLO NUCLEAR GENERATING PLANT

DOCKET NO. 50-263

(TAC NO. ME9893)

By application dated October 30, 2012 (Agencywide Documents Access and Management System Accession No. ML12307A433), Northern States Power Company – Minnesota, doing business as Xcel Energy, Inc., submitted a license amendment request to revise the Monticello Nuclear Generating Plant (MNGP) Technical Specifications to support fuel storage system changes and a revised criticality safety analysis that addresses legacy fuel types and new fuel designs.

The U.S. Nuclear Regulatory Commission (NRC) staff in the Steam Generator Tube Integrity and Chemical Engineering Branch of the Office of Nuclear Reactor Regulation has determined that additional information is required to complete its review.

The NRC staff requests the following information:

Xcel Energy states in its application that a uniform 0.055 inch void region is used in the criticality safety analysis as a conservative model for potential blistering of Boral. Please provide a response to the following:

1. Provide justification for why a uniform 0.055 inch void region is conservative.
2. What acceptance criterion will be used to determine if the blistered volume of a Boral panel meets or exceeds a uniform 0.055 inch void region?
3. Describe how Xcel Energy will determine if this acceptance criterion is being met?
4. If the acceptance criterion is not met, describe what additional actions may be taken.

The NRC staff also requests the following information:

5. When was the last time a neutron attenuation test was performed (in-situ or coupon) for the Boral in the MNGP spent fuel pool?

6. When is the next planned neutron attenuation test at MNGP?
7. Your application states that Boral integrity is managed using the Water Chemistry Aging Management Program and One-time Inspection Program as described in NUREG-1865. While the use of Industry and historical plant operating experience is useful for informing a neutron absorbing material aging management program, it is not an adequate replacement for physical testing. Additionally, your Water Chemistry Aging Management Program does not include neutron attenuation testing. The concern is how MNGP will continue to monitor and mitigate any degradation or deformation of your Boral so that it will not reduce the neutron attenuation capability of the material in the future.
 - a. Discuss whether you plan on performing in-situ neutron attenuation testing on the Boral panels installed in the spent fuel pool? If so, provide the frequency, acceptance criteria, and proposed corrective actions should the acceptance criteria not be met after a given test.
 - b. Alternatively, if in-situ testing will not be performed, describe the method you will use to detect any degradation, deformation, or reduction in neutron attenuation capability of your Boral, and what actions will be taken to monitor and mitigate future degradation, deformation, or reduction in neutron attenuation capability.