

Sam Belcher
Vice President-Nine Mile Point

P.O. Box 63
Lycoming, New York 13093
315.349.5200
315.349.1321 Fax

CENGSM

a joint venture of



Constellation
Energy



EDF

NINE MILE POINT
NUCLEAR STATION

July 15, 2011

U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

ATTENTION: Document Control Desk

SUBJECT: Nine Mile Point Nuclear Station
Unit No. 2; Docket No. 50-410

Revised Response to Request for Additional Information Regarding Nine Mile Point Nuclear Station, Unit No. 2 – Re: The License Amendment Request for Extended Power Uprate Operation (TAC No. ME1476) – BORAL[®] Monitoring Program

- REFERENCES:**
- (a) Letter from K. J. Polson (NMPNS) to Document Control Desk (NRC), dated May 27, 2009, License Amendment Request (LAR) Pursuant to 10 CFR 50.90: Extended Power Uprate
 - (b) E-mail from R. Guzman (NRC) to J. J. Dosa (NMPNS), dated June 23, 2011, Supplemental Information Needed for RAI-3
 - (c) Letter from M. A. Philippon (NMPNS) to Document Control Desk (NRC) dated June 13, 2011, Response to Request for Additional Information Regarding Nine Mile Point Nuclear Station, Unit No. 2 – Re: The License Amendment Request for Extended Power Uprate Operation (TAC No. ME1476) – Steam Dryer and BORAL[®] Monitoring Program

Nine Mile Point Nuclear Station, LLC (NMPNS) hereby transmits revised and supplemental information in support of a previously submitted request for amendment to Nine Mile Point Unit 2 (NMP2) Renewed Operating License (OL) NPF-69. The request, dated May 27, 2009 (Reference a), proposed an amendment to increase the power level authorized by OL Section 2.C.(1), Maximum Power Level, from 3467 megawatts-thermal (MWt) to 3988 MWt.

A001
NMP2

Document Control Desk

July 15, 2011

Page 2

By e-mail dated June 23, 2011 (Reference b), the NRC staff requested supplemental information regarding the response to a request for additional information (RAI) submitted on June 13, 2011 (Reference c) regarding the BORAL[®] Monitoring Program. The Attachment to this letter provides the supplemental information in the form of a revised response to CSGB-RAI-3.a.

There are no regulatory commitments in this submittal.

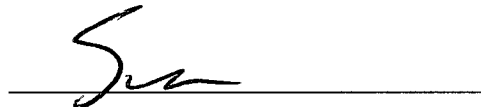
Should you have any questions regarding the information in this submittal, please contact John J. Dosa, Director Licensing, at (315) 349-5219.

Very truly yours,



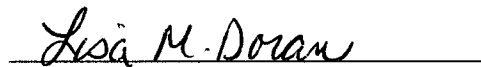
STATE OF NEW YORK :
: TO WIT:
COUNTY OF OSWEGO :

I, Sam Belcher, being duly sworn, state that I am Vice President – Nine Mile Point, and that I am duly authorized to execute and file this response on behalf of Nine Mile Point Nuclear Station, LLC. To the best of my knowledge and belief, the statements contained in this document are true and correct. To the extent that these statements are not based on my personal knowledge, they are based upon information provided by other Nine Mile Point employees and/or consultants. Such information has been reviewed in accordance with company practice and I believe it to be reliable.



Subscribed and sworn before me, a Notary Public in and for the State of New York and County of Oswego, this 15 day of July, 2011.

WITNESS my Hand and Notarial Seal:


Notary Public

My Commission Expires:

9/12/2013
Date

SB/STD

Lisa M. Doran
Notary Public in the State of New York
Oswego County Reg. No. 01DO6029228
My Commission Expires 9/12/2013

Attachment: Revised Response to Request for Additional Information Regarding License Amendment Request for Extended Power Uprate Operation

cc: NRC Regional Administrator, Region I
NRC Resident Inspector
NRC Project Manager
A. L. Peterson, NYSERDA

ATTACHMENT

**REVISED RESPONSE TO REQUEST FOR ADDITIONAL
INFORMATION REGARDING LICENSE AMENDMENT REQUEST FOR
EXTENDED POWER UPRATE OPERATION**

ATTACHMENT
REVISED RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION REGARDING
LICENSE AMENDMENT REQUEST FOR EXTENDED POWER UPRATE OPERATION

By letter dated May 27, 2009, as supplemented on August 28, 2009, December 23, 2009, February 19, 2010, April 16, 2010, May 7, 2010, June 3, 2010, June 30, 2010, July 9, 2010, July 30, 2010, October 8, 2010, October 28, 2010, November 5, 2010, December 10, 2010, December 13, 2010, January 19, 2011, January 31, 2011, February 4, 2011, March 23, 2011, May 9, 2011, and June 13, 2011, Nine Mile Point Nuclear Station, LLC (NMPNS) submitted for Nuclear Regulatory Commission (NRC) review and approval, a proposed license amendment requesting an increase in the maximum steady-state power level from 3467 megawatts thermal (MWt) to 3988 MWt for Nine Mile Point Unit 2 (NMP2).

By e-mail dated June 23, 2011, the NRC staff requested supplemental information regarding the response to a request for additional information (RAI) submitted on June 13, 2011, regarding the BORAL[®] Monitoring Program. This attachment provides the supplemental information in the form of a revised response to CSGB-RAI-3.a.

The NRC request is repeated (in italics), followed by the NMPNS response.

ATTACHMENT
REVISED RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION REGARDING
LICENSE AMENDMENT REQUEST FOR EXTENDED POWER UPRATE OPERATION

RAI#1 from NRC E-mail dated April 14, 2011

Supplemental CSGB-RAI-3.a

On page 6 of Attachment 1 of its letter dated March 23, 2011, the licensee states that, "NMPNS does not intend to utilize these coupons [for the initial 10 [BORAL®] spent fuel racks] since the coupon tree was not installed at the same time as the associated racks." The NRC staff is uncertain whether the [BORAL®] material installed in 2001 has an effective surveillance monitoring program. Please provide the surveillance approach and testing for these 10 [BORAL®] spent fuel racks.

Revised NMPNS Response

In an e-mail dated May 12, 2011, the NRC provided the following feedback regarding the response to CSGB-RAI-3.a:

Specifically, after review of the response to RAI-3.a, the staff understands that NMPNS would like to use the inspection and testing of coupons installed in 2007 to monitor [BORAL®] spent fuel racks installed in 2001. However, the staff does not think that using coupons (installed 6 years after the [BORAL®] material it's supposed to monitor) is an appropriate surveillance monitoring approach/program because the racks have had more exposure to spent fuel pool conditions than the coupons. The NMPNS response appears to be inconsistent with what the staff understood was the licensee's intended approach for answering the question (when presented in the previous phone call). If a new analysis has been performed to justify using the 2007 coupons to represent the 2001 [BORAL®], the staff requests the licensee to provide it as additional explanation to support the RAI-3.a supplemental response.

On May, 18, 2011, NMPNS and the NRC discussed the NMP2 monitoring program regarding the BORAL® spent fuel racks, and the NRC feedback provided in an e-mail dated May 12, 2011. NMPNS understands that the coupon tree installed in 2007, comprised of the same lot of material as our Phase 1 BORAL® spent fuel racks installed at NMP2 in 2001, does not have as much exposure to the NMP2 spent fuel pool conditions as the spent fuel racks installed in 2001. As such, NMPNS will conduct in-situ Boron-10 Areal Density Gauge for Evaluating Racks (BADGER) testing on the Phase 1 BORAL® spent fuel racks installed at NMP2 in 2001 on a 10-year frequency, beginning in 2012. The BADGER testing program will be the surveillance program for the Phase 1 BORAL® spent fuel racks installed at NMP2 in 2001.

In an e-mail dated June 23, 2011, the NRC requested supplemental information regarding the response to CSGB-RAI-3.a. The NRC e-mail states:

In its response dated June 13, 2011, the licensee states that, "NMPNS will conduct in-situ Boron -10 Areal Density Gauge for Evaluating Racks (BADGER) testing on the Phase 1 Boral Spent fuel racks installed at NMP2 in 2001 on a 10-year frequency, beginning in 2012."

Based on this response, the NRC staff understands that the licensee plans to perform in-situ testing of their Boral spent fuel pool racks installed in 2001; however, the staff notes that NMPNS did not provide information regarding the acceptance criteria for the in-situ test. While the NRC staff views the licensee's proposed plan to conduct in-situ testing as acceptable, the staff has determined that the acceptance criteria information is needed to complete its safety evaluation for the Boral monitoring

ATTACHMENT
REVISED RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION REGARDING
LICENSE AMENDMENT REQUEST FOR EXTENDED POWER UPRATE OPERATION

program. Please note that the original RAI-3 in NRC letter dated February 3, 2011, requested the licensee to provide the acceptance criteria for its surveillance/monitoring program. Accordingly, the staff requests NMPNS to provide the acceptance criteria for the in-situ test, including the corrective actions taken if the acceptance [criterion] is not met.

For the Phase 1 BORAL[®] spent fuel racks installed at NMP2 in 2001, the BADGER tests will confirm that the minimum Boron-10 areal density assumed in the spent fuel pool criticality analyses is met. Currently, the spent fuel pool criticality analyses assume a minimum Boron-10 areal density of 20 mg Boron-10/cm². Thus, the acceptance criterion for the BADGER tests will be to ensure a Boron-10 areal density \geq 20 mg Boron-10/cm².

If the acceptance criterion is not met, the following actions would be taken:

1. The condition would be entered into the site's Corrective Action Program.
2. Administrative controls would be implemented to ensure that fuel is not stored within the impacted location(s) until the condition is resolved.
3. An evaluation would be conducted to determine if more frequent and expanded surveillance of the spent fuel storage racks is needed.