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P.O. Box 63  
Lycoming, New York 13093

NINE MILE POINT  
NUCLEAR STATION

June 13, 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

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<sup>®</sup> 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 T. H. Darling (NMPNS), dated January 31, 2011, Supplemental Steam Dryer Questions Following 1/13/11 Telecom
  - (c) E-mail from R. Guzman (NRC) to T. H. Darling (NMPNS), dated February 18, 2011, NMP2 EPU LAR – Clarifications on Supplemental Steam Dryer RAIs – 2/15/11 Teleconference
  - (d) E-mail from R. Guzman (NRC) to J. J. Dosa (NMPNS), dated May 12, 2011, NMP2 EPU May 9 RAI Response – Feedback
  - (e) Letter from S. Belcher (NMPNS) to Document Control Desk (NRC) dated December 10, 2010, 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

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NRR

Nine Mile Point Nuclear Station, LLC (NMPNS) hereby transmits 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.

By e-mails dated January 31, 2011 and February 18, 2011 (References b and c), the NRC staff requested additional information (RAI) regarding the steam dryer. In addition, in an e-mail dated May 12, 2011 (Reference d), the NRC provided feedback regarding the NMP2 BORAL<sup>®</sup> Monitoring Program that requires an NMPNS response. Attachment 1 (non-proprietary) and Attachment 5 (proprietary) provide the NMPNS response to the RAIs.

To support the response to the RAI issued in the e-mail dated January 31, 2011, NMPNS is providing: 1) Continuum Dynamics, Inc. (CDI) Report No. 11-03, "Sub-Modeling in the Nine Mile Point Unit 2 Steam Dryer," Revision 1 (Attachment 6 (proprietary)); and 2) CDI Report No. 11-04, "Stress Evaluation of Nine Mile Point Unit 2 Steam Dryer Using ACM Rev. 4.1 Acoustic Loads," Revision 0 (Attachment 3 (non-proprietary) and Attachment 7 (proprietary)).

In addition, Revision 0 of CDI Report No. 11-04, "Stress Evaluation of Nine Mile Point Unit 2 Steam Dryer Using ACM Rev. 4.1 Acoustic Loads," satisfies the following commitment made by NMPNS in a letter dated December 10, 2010 (Reference e):

"Within two months of final resolution of NRC RAIs regarding the steam dryer analysis methodology, NMPNS will submit a revision to CDI Report No. 10-12, Design and Stress Evaluation of Nine Mile Point Unit 2 Steam Dryer Modifications for EPU Operation."

CDI Report No. 11-04 supersedes CDI Report No. 10-12.

Attachments 5 through 7 are considered to contain proprietary information exempt from disclosure pursuant to 10 CFR 2.390. Therefore, on behalf of Continuum Dynamics, Incorporated (CDI), NMPNS hereby makes application to withhold these attachments from public disclosure in accordance with 10 CFR 2.390(b)(1). The affidavit from CDI detailing the reason for the request to withhold the proprietary information is provided in Attachment 4. CDI Report No. 11-03 (Attachment 6) is deemed proprietary in its entirety; thus a non-proprietary version of this attachment has not been provided in accordance with NRC Information Notice 2009-07, Requirements for Submittals, which states: "In instances in which a nonproprietary version would be of no value to the public because of the extent of the proprietary information, the agency does not expect a nonproprietary version to be submitted."

Attachment 2 defines the new regulatory commitment made 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,



Michel A. Philippon  
Manager Operations

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

I, Michel Philippon, being duly sworn, state that I am Manager Operations – 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 13<sup>th</sup> day of June, 2011.

WITNESS my Hand and Notarial Seal:

  
Notary Public

My Commission Expires:

11/12/2014  
Date

**TONYA L. JONES**  
Notary Public in the State of New York  
Oswego County Reg. No. 01JO6083354  
My Commission Expires 11/12/2014

SB/STD

Attachments:

1. Response to Request for Additional Information Regarding License Amendment Request for Extended Power Uprate Operation (Non-Proprietary)
2. List of Regulatory Commitments
3. CDI Report No. 11-04NP, "Stress Evaluation of Nine Mile Point Unit 2 Steam Dryer Using ACM Rev. 4.1 Acoustic Loads," Revision 0 (Non-Proprietary)
4. Affidavit from Continuum Dynamics, Incorporated, Justifying Withholding Proprietary Information
5. Response to Request for Additional Information Regarding License Amendment Request for Extended Power Uprate Operation (Proprietary)
6. CDI Report No. 11-03P, "Sub-Modeling in the Nine Mile Point Unit 2 Steam Dryer," Revision 1 (Proprietary)
7. CDI Report No. 11-04P, "Stress Evaluation of Nine Mile Point Unit 2 Steam Dryer Using ACM Rev. 4.1 Acoustic Loads," Revision 0 (Proprietary)

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cc: NRC Regional Administrator, Region I  
NRC Resident Inspector  
NRC Project Manager  
A. L. Peterson, NYSERDA (w/o Attachments 5 through 7)

## **ATTACHMENT 1**

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### **RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION REGARDING LICENSE AMENDMENT REQUEST FOR EXTENDED POWER UPRATE OPERATION (NON-PROPRIETARY)**

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Certain information, considered proprietary by Continuum Dynamics, Incorporated, has been deleted from this Attachment. The deletions are identified by double square brackets.

**ATTACHMENT 1**  
**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION REGARDING LICENSE**  
**AMENDMENT REQUEST FOR EXTENDED POWER UPRATE OPERATION**  
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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, and May 9, 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-mails dated January 31, 2011 and February 18, 2011, the NRC staff requested additional information (RAI) regarding the steam dryer. In addition, in an e-mail dated May 12, 2011, the NRC provided feedback on the NMP2 BORAL<sup>®</sup> Monitoring Program. This attachment provides the NMPNS responses to the RAIs and a revised response to an NRC RAI (Supplemental CSGB-RAI-3.a).

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**Draft RAI from E-mail dated January 31, 2011**

**NMP2-EMCB-SD-RAI-8 S02 (d)**

*When the original Acoustic Circuit Model (ACM) method was developed with the aid of the Quad Cities, Unit 2 (QC2) plant data, two sets of data were used to develop and validate the ACM model. The two data sets were taken at 790 MWe and 930 MWe power levels, corresponding approximately to the original licensed thermal power (OLTP) and extended power uprate (EPU) conditions. One of these data sets was used to develop the model parameters and the other set was used to validate and correct these parameters. As discussed in the CDI Report 07-09, "ACM Revision 4: Methodology to Predict Full Scale Steam Dryer Loads from In-Plant Measurements, with the Inclusion of a Low Frequency Hydrodynamic Contribution," the damping in the main steam lines (MSLs) was increased by 70 % for the frequency range between 0 and 100 Hz, and only one set of data (data of OLTP) was used to develop the bias and uncertainties of the ACM Revision 4 methodology. In the CDI Report 10-09, "ACM Revision 4.1: Methodology to Predict Full Scale Steam Dryer Loads from In-Plant Measurements," additional changes were made to develop the ACM Revision 4.1 methodology.*

*This new version of the ACM includes [[*

*]]. Apparently, these bias and uncertainties are substantially smaller than those associated with both the original ACM method and its 4<sup>th</sup> revision. In order to ensure that the bias errors and uncertainties of ACM 4.1 are conservative, the licensee (NMPNS) is requested to address the following items:*

*(a) Validate the ACM Revision 4.1 methodology against the QC2 data obtained at EPU conditions and revise, as warranted, the model parameters of ACM Rev 4.1, including the bias and uncertainty errors.*

*(b) Include the ACM version 4.0 data in the report for ACM Revision 4.1 (e.g., in Figures 6.1, 6.2, 8.2, and 8.3, and in Table 7.1 of the CDI Report 10-09P, Rev. 2). Also, the licensee is requested to add a bar chart per Figure RAI-8 S01 (d) in RAI response NMP2-EMCB-SD-RAI-8 S01 (d) with updated values. Note that bias errors and uncertainties for ACM version 4.0 should be consistent with those approved previously by the NRC. In other words, the bias and uncertainty errors should be defined over the same frequency ranges that were approved by the NRC and used in ACM version 4.0.*

**Clarifications to Draft RAI Issued on February 18, 2011**

**NMP2-EMCB-SD-RAI-8 S02(d): Clarification for Part (a)**

*Since the safety relief valve (SRV) resonances are not expected at EPU conditions for the NMP2 plant, the staff agrees that the ACM 4.1 model may be validated using the Quad Cities Unit 2 data at the power level of 840 MWe instead of at the 940 MWe power level. However, prior to using the ACM 4.1 model for any other plant which may exhibit SRV resonances near EPU, the staff requests that ACM 4.1 be validated over a wider range of Mach numbers, that also include the SRV resonances.*

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**NMP2-EMCB-SD-RAI-8 S02(d): Clarification for Part (b)**

*As described in Section 6 of CDI Report 07-09P Rev. 1, the bias and uncertainty for ACM Rev. 4.0 was computed over six groups of sensors and then averaged. However, as noted in Section 7 of CDI Report 10-09P, Rev. 3, the bias and uncertainty for ACM Rev. 4.1 was computed over a single group of sixteen pressure sensors. The licensee is requested to update the bias error and uncertainty calculations for the ACM Rev. 4.1 (Section 7 of CDI Report 10-09P, Rev. 3) to reflect the same procedure used previously to determine the bias errors and uncertainties for ACM Rev. 4.0 (Section 6 of CDI Report 07-09P, Rev. 1).*

**NMPNS Response**

The NRC issued the draft RAI in an e-mail dated January 31, 2011, and subsequently issued clarifications to the RAI in an e-mail dated February 18, 2011. The NMPNS response is to the clarified RAI.

**Response for Part (a)**

This response examines the bias and uncertainties for the Quad Cities Unit 2 (QC2) 790 Megawatt-electric (MWe) power level with 16 pressure sensors (as described in Revision 3 of Continuum Dynamics, Inc. (CDI) Report No. 10-09 submitted to the NRC in a letter dated February 4, 2011) and with 6 average sensors, and the QC2 840 MWe power level with 6 average sensors, with all calculations undertaken with Revision 4.1 of CDI's Acoustic Circuit Model (ACM). Model parameter values have not been changed from those previously reported in Revision 3 of CDI Report No. 10-09 for the 790 MWe power level with 16 pressure sensors.

The 16 pressure sensors were located on the outer bank hoods of QC2: P1 to P12 were placed on the outer bank hood facing main steam lines A and B, while P18 to P21 were placed on the outer bank hood facing main steam lines C and D. When the pressure signals are averaged, the main steam line A/B transformed signals are averaged across three vertical positions (P1 to P3, P4 to P6, P7 to P9, and P10 to P12), and the main steam line C/D transformed signals are averaged across two vertical positions (P18 and P20, and P19 and P21).

Bias and uncertainty values computed for the QC2 benchmark at the 790 MWe power level with 16 pressure sensors (from Revision 3 of CDI Report No. 10-09) are shown in Table 1.



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**Table 1 – QC2 Benchmark at 790 MWe with 16 Pressure Sensors**

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Bias and uncertainty at the 790 MWe and 840 MWe power levels with 6 average sensors are shown in Table 2.

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**Table 2 – QC2 Benchmark at 790 MWe and 840 MWe with 6 Average Sensors**

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Total uncertainty for NMP2, including the plant-specific bias and uncertainties, based on the QC2 790 MWe power level with 16 sensors (obtained from Revision 2 of CDI Report No. 10-10 submitted in a letter dated December 10, 2010) and with 6 average sensors, and the QC2 840 MWe power level with 6 average sensors, is shown in Table 3.

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**Table 3 – NMP2 Total Uncertainty**

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The impact on the NMP2 dryer load can be seen by changing the above percentages into the loading factors to be applied to the ACM prediction, as shown in Figure 1.

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**Figure 1 – Loading Factor versus Frequency Interval**

Response for Part (b)

The averaging of sensors into six groups, and their comparison for bias and uncertainties, and total uncertainty, are given in the response to Part (a). The following table summarizes the minimum stress ratios computed for the three cases examined in response to Part (a):

	<b>790 MWe with 16 sensors</b>	<b>790 MWe with 6 averages</b>	<b>840 MWe with 6 averages</b>
Minimum Stress Ratio	3.09	3.29	3.47

**Table 4 – Minimum Stress Ratios for Various Cases**

In Table 5, stress ratios at the 17 locations on the NMP2 dryer with the lowest stress ratios at the 790 MWe with 16 sensors are compared with the corresponding stress ratios for the 790 MWe power level with 6 average sensors and the 840 MWe power level with 6 average sensors. The minimum stress ratios are highlighted and appear in Table 4.

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<b>LOCATION</b>	<b>Node</b>	<b>790 MWe 16 Sensors</b>	<b>790 MWe 6 Averages</b>	<b>840 MWe 6 Averages</b>
1. Closure Plate/Middle Hood	89317	3.52	3.88	3.67
2. Outer Cover Plate/Outer Hood	95236	<b>3.09</b>	3.40	3.84
3. Hood Support/Outer Cover Plate/Outer Hood	95267	3.13	<b>3.29</b>	3.59
4. Hood Support/Inner Hood	95644	3.38	3.50	4.15
5. Top Thick Plate/Inner Hood/Top Plate	85512	3.22	3.34	3.93
6. Hood Support/Outer Base Plate/Middle Backing Bar	98067	3.31	3.52	3.76
7. Thick Vane Bank Plate/Thin Vane Bank Plate/Side and Plate/Side Plate Ext/End Plate	90170	3.42	3.67	<b>3.47</b>
8. Hood Support/Inner Hood	99540	3.17	3.29	3.87
9. Hood Support/Inner Hood	95638	3.51	3.64	4.33
10. Side Plate/Top Plate	93031	3.64	4.10	4.17
11. Closure Plate/Inner Hood	95975	4.00	4.34	4.20
12. Entry Bottom Perf/Side Plate/End Plate	91154	3.52	3.81	3.68
13. Top Thick Plate/Side Plate/Closure Plate	96096	4.09	4.45	4.28
14. Side Plate/Brace	89646	4.22	4.51	4.33
15. Hood Support/Inner Hood	90430	3.65	3.79	4.48
16. Hood Support/Middle Hood	96037	3.78	4.13	4.53
17. Outer Cover Plate/Man Way Overlap	87488	3.76	4.26	4.66

**Table 5 – Stress Ratios for Various Cases**

Revision 3 of CDI Report No. 10-09 and Revision 2 of CDI Report No. 10-10 (submitted in letters dated February 4, 2011 and December 10, 2010, respectively) were developed with 16 sensors. These results are compared with 6 average sensors in Table 4. The 6 average sensors were established consistent with the methodology previously approved by the NRC in the Hope Creek and Vermont Yankee Extended Power Upgrades.

In this RAI, the NRC requested that the six average sensor results be shown, with summary stress results provided in Table 4 and detailed results provided in Table 5. [[

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Additional Request for Information

In a teleconference between the NRC and NMPNS held on April 21, 2011, the NRC requested that NMPNS explain why the bias computed with 16 pressure sensors is not the same as the bias computed with 6 average sensors. The explanation follows.

The bias formula may be written (from Revision 2 of CDI Report No. 10-10 submitted in a letter dated December 10, 2010) as:

$$\text{BIAS} = \frac{\sum \text{RMS}_{\text{measured}}}{\sum \text{RMS}_{\text{predicted}}} - 1 = \frac{3 \sum \text{RMS}_{\text{measured}}}{3 \sum \text{RMS}_{\text{predicted}}} - 1$$

where it may be seen that if the predictions are, on average, larger than the measured data, the bias will be negative.

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**NMP2-EMCB-SD-RAI 21 S02**

*In response to NMP2-EMCB-SD-RAI 21 S01, the licensee describes the generic submodeling procedure followed for the stress analysis of the NMP2 steam dryer. The licensee provides a detailed description of its application to the modified closure plate to illustrate its use. The staff has several questions regarding this procedure and requests following information to address these questions, as provided below.*

- a. Does any submodeling for determining the stresses at a structural discontinuity include another structural discontinuity near its cut boundary?*
- b. For each submodel, provide a comparison of stresses (including stress distribution and maximum stress) at the structural discontinuity from the global analysis and from the submodeling prior to any mesh refinement. Please discuss how this difference in the stresses at the discontinuity is addressed in the submodel stress analysis?*
- c. What is the error associated with the assumption of the linear distribution of damping and inertia forces?*
- d. Provide the results showing convergence of the stresses at the structural discontinuity as the mesh is refined. For each submodel, please discuss what the bias error is associated with the mesh refinement.*
- e. To avoid significant computational efforts, the licensee uses the global stress analysis results to identify the pair of time indices,  $i$  and  $j$ , which maximizes the alternating stress intensity,  $S_{ij}$ . Then, the licensee performs a static analysis of the submodel at these two times. However, these two times (pair  $i$  and  $j$ ) may not correspond to the pair of time indices,  $k$  and  $l$ , that would maximize  $S_{kl}$  based on the full dynamic analysis of the submodel. Please discuss any potential errors introduced by this use of global stress analysis results.*
- f. Please address any potential total bias and uncertainty errors associated with the use of submodeling for estimating the stresses at the structural discontinuity.*
- g. In the stress tables of the final stress analysis report, please list the stress reduction factors resulting from the submodeling analysis. Also, please identify the weld modifications that are included in the final analysis.*

**NMPNS Response**

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Conclusions

CDI Report No. 11-04 (Attachments 3 and 7) provides the final ACM 4.1 based NMP2 steam dryer stress evaluation. It determined that the NMP2 steam dryer meets the NRC staff recommended minimum alternating stress ratio of 2.0 for EPU conditions with the implementation of the following modifications:

1. Reinforcement strips are added to the closure plates.
2. Reinforcements to the upper-most and middle lifting rod braces are made in the form of additional strengthening plates.
3. Increase the attachment weld size of the lower-most lifting rod brace from  $\frac{1}{4}$ " to  $\frac{1}{2}$ ".
4. A  $\frac{1}{8}$ " curved plate is placed over the middle hood section lying outboard of the closure plate.
5. Four 15 lb masses are added to the central inner hood panels.
6. Stress relief cut-outs are added to the outer hood/hood support/base plate junctions to alleviate local stresses.
7. Four 10 lb masses are added to the central middle hood panels.

These modifications are discussed in detail in Section 5 of CDI Report No. 11-04 (Attachments 3 and 7).

Note: CDI Report No. 11-04 (Attachments 3 and 7) also evaluated the addition of a wrap-around weld to the bottom of the drain channel/skirt weld. This modification is not required to meet the recommended minimum alternating stress ratio of 2.0 for EPU conditions. Therefore, it will not be installed.

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Additionally, CDI Report No. 11-04 (Attachments 3 and 7) concludes that only [[  
]] are required to demonstrate that the steam dryer meets the NRC staff recommended minimum alternating stress ratio of 2.0 for EPU conditions. These [[  
]] are required to demonstrate that modifications 2 and 6 listed above meet the recommended minimum alternating stress ratio of 2.0. CDI Report No. 11-03 (Attachment 6) contains additional sub-models using the [[  
]] that demonstrate substantial margin above the recommended minimum alternating stress ratio of 2.0 for several other steam dryer locations.

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**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<sup>®</sup>] 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<sup>®</sup>] material installed in 2001 has an effective surveillance monitoring program. Please provide the surveillance approach and testing for these 10 [BORAL<sup>®</sup>] spent fuel racks.*

**Original NMPNS Response**

As stated in the letter dated March 23, 2011, a coupon tree representative of the spent fuel racks installed in 2001 was installed in the NMP2 spent fuel pool in 2007. Following a telecom with the NRC on April 19, 2011, that clarified this RAI, NMPNS revised the NMP2 [BORAL<sup>®</sup>] Monitoring Program to include a plan to test and inspect coupons from the coupon tree representative of the spent fuel racks installed in 2001.

The NMP2 [BORAL<sup>®</sup>] Monitoring Program now requires a coupon from the coupon tree representative of the spent fuel racks installed in 2001 and a coupon from one of the coupon trees representative of the spent fuel racks installed in 2007 to be removed in 2012. Following this, a coupon from the coupon tree representative of the spent fuel racks installed in 2001 and a coupon from one of the coupon trees representative of the spent fuel racks installed in 2007 will be removed on a ten-year frequency.

The coupons from the coupon trees will be tested and inspected in accordance with the methodology and acceptance criteria defined in the letter dated March 23, 2011.

**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<sup>®</sup>] spent fuel racks installed in 2001. However, the staff does not think that using coupons (installed 6 years after the [BORAL<sup>®</sup>] 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<sup>®</sup>], 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<sup>®</sup> 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<sup>®</sup> spent fuel racks installed at NMP2 in 2001, does not have as much exposure to the NMP2 spent

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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<sup>®</sup> 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<sup>®</sup> spent fuel racks installed at NMP2 in 2001.

**ATTACHMENT 2**

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**LIST OF REGULATORY COMMITMENTS**

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**ATTACHMENT 2**  
**LIST OF REGULATORY COMMITMENTS**

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The following table identifies the action committed to in this document by Nine Mile Point Nuclear Station, LLC. Any other statements in this submittal are provided for information purposes and are not considered to be regulatory commitments.

Direct questions regarding this commitment to John J. Dosa, Director Licensing, at (315) 349-5219.

<b>REGULATORY COMMITMENT</b>	<b>DUE DATE</b>
NMPNS will conduct in-situ Boron-10 Areal Density Gauge for Evaluating Racks (BADGER) testing on the Phase 1 BORAL® 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® Racks installed at NMP2 in 2001.	10-year frequency, beginning in 2012