

This letter forwards proprietary information in accordance with 10 CFR 2.390. The balance of this letter may be considered non-proprietary upon removal of Attachment 4.

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**NINE MILE POINT  
NUCLEAR STATION**

March 11, 2013

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

Submission of Evaluation to Establish Inspection Intervals for Jet Pump Holddown Beams Fabricated from Modified Alloy 718 Material

- REFERENCES:**
- (a) Letter from F. R. Payne (NMPNS) to NRC (Document Control Desk), dated December 30, 2011, License Amendment Request Pursuant to 10 CFR 50.90: Use of Modified Alloy 718 Material in Jet Pump Holddown Beams
  - (b) Letter from K. Langdon (NMPNS) to NRC (Document Control Desk), dated March 20, 2012, License Amendment Request Pursuant to 10 CFR 50.90: Use of Modified Alloy 718 Material in Jet Pump Holddown Beams – Supplemental Information in Response to NRC Request for Additional Information
  - (c) Letter from R. V. Guzman (NRC) to K. Langdon (NMPNS), dated April 13, 2012, Nine Mile Point Nuclear Station, Unit No. 2 - Issuance of Amendment Regarding a Change to the Updated Safety Analysis Report Allowing the Use of Modified Alloy 718 Material in Jet Pump Holddown Beams (TAC No. ME7800)

By letter dated December 30, 2011 (Reference a), as supplemented by letter dated March 20, 2012 (Reference b), Nine Mile Point Nuclear Station, LLC (NMPNS) submitted a request to use Modified Alloy 718 material for fabrication of the Nine Mile Point Unit 2 (NMP2) reactor recirculation system jet pump holddown beams. The NRC approved the request in a letter dated April 13, 2012 issuing NMP2 License Amendment No. 141 (Reference c). The new jet pump holddown beams were installed during the spring 2012 NMP2 refueling outage.

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In Reference (a), NMPNS included the following regulatory commitment regarding the establishment of inspection intervals for the Modified Alloy 718 jet pump holddown beams:

In accordance with BWRVIP guidelines, NMPNS will submit to the NRC an evaluation to support establishment of inspection intervals for the new holddown beams in accordance with criteria contained in the latest revision of BWRVIP-41, "BWR Vessel and Internals Project, BWR Jet Pump Assembly Inspection and Flaw Evaluation Guidelines." This NMPNS evaluation will be submitted approximately one year prior to the next scheduled NMP2 refueling outage following installation of the Modified Alloy 718 jet pump holddown beams.

In accordance with the above commitment, the evaluation to support establishment of an inspection interval for the new jet pump holddown beams is documented in the Westinghouse Engineering Report that is provided in Attachment 2 (non-proprietary) and Attachment 4 (proprietary). Based on the results of the evaluation, NMPNS will perform the initial baseline inspection of the Modified Alloy 718 jet pump holddown beams within 24 years after installation and then perform re-inspections every 16 years thereafter. This inspection frequency has been established by following the technical approach used in BWRVIP-138, Revision 1, "Updated Jet Pump Beam Inspection and Flaw Evaluation Guidelines," and considering the stress corrosion cracking (SCC) susceptibility of Modified Alloy 718 material when compared to that of Alloy X-750. The comparison of Modified Alloy 718 with Alloy X-750 addresses a variety of factors, including fabrication process, material composition, mechanical properties, stress relaxation, and fatigue initiation. The comparison shows that in all cases, Modified Alloy 718 is as good as or better than Alloy X-750 under BWR operating conditions. In two other important areas, SCC initiation and SCC crack growth, modified Alloy 718 is significantly better than X-750.

The information contained in Attachment 4 is considered by Westinghouse Electric Company LLC (Westinghouse) to contain proprietary information exempt from disclosure pursuant to 10 CFR 2.390. Therefore, on behalf of Westinghouse, NMPNS hereby makes application to withhold Attachment 4 from public disclosure in accordance with 10 CFR 2.390(b)(1). The affidavit from Westinghouse detailing the reasons for the request to withhold the proprietary information is provided in Attachment 3. A non-proprietary version of the same document is provided in Attachment 2. The regulatory commitments contained in this letter are listed in Attachment 1.

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,



Paul M. Swift  
Manager Engineering Services

PMS/DEV

Document Control Desk

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Attachments:

1. List of Regulatory Commitments
2. Westinghouse Engineering Report XGEN-2012-25-NP, Revision 1, Technical Basis for the Inspection Frequency of the Modified Alloy 718 Jet Pump Beam (Non-Proprietary)
3. Affidavit from Westinghouse Electric Company LLC Justifying Withholding Proprietary Information
4. Westinghouse Engineering Report XGEN-2012-25-P, Revision 1, Technical Basis for the Inspection Frequency of the Modified Alloy 718 Jet Pump Beam (Proprietary)

cc: Regional Administrator, Region I, NRC  
Project Manager, NRC  
Resident Inspector, NRC

## ATTACHMENT 1

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### LIST OF REGULATORY COMMITMENTS

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The following table identifies the regulatory commitments in this document. Any other statements in this submittal represent intended or planned actions. They are provided for information purposes and are not considered to be regulatory commitments.

<b>REGULATORY COMMITMENT</b>	<b>DUE DATE</b>
Nine Mile Point Nuclear Station, LLC (NMPNS) will perform the initial baseline inspection of the Nine Mile Point Unit 2 (NMP2) Modified Alloy 718 jet pump holddown beams within 24 years after installation and then perform re-inspections every 16 years thereafter.	Initial Baseline Inspection by May 1, 2036.  Re-inspection every 16 years after May 1, 2036 (provided the unit is still operating).