



Exelon Generation®

10 CFR 50.55a

NMP1L 3159
June 6, 2017

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

Nine Mile Point Nuclear Station, Unit 1
Renewed Facility Operating License No. DPR-63
Docket No. 50-220

Subject: Fourth Inservice Inspection Interval, Third Inservice Inspection Period
2017 Owner's Activity Report for RFO-24 Inservice Examinations

Pursuant to 10 CFR 50.55a, Nine Mile Point Nuclear Station, LLC (NMPNS) hereby submits the attached Fourth Inservice Inspection Interval, Third Inservice Inspection Period, 2017 Owner's Activity Report for RFO-24 Inservice Examinations, for Nine Mile Point Unit 1 (NMP1). The report is contained in Attachment 1 to this letter, and summarizes the results of examinations performed during the first refueling outage (RFO-24) of the Third Inservice Inspection Period of the Fourth Ten-Year Inspection Interval (August 23, 2009 through August 22, 2019).

This activity report meets the requirements of the American Society of Mechanical Engineers (ASME), Code Case N-532-4, "Alternative Requirements to Repair and Replacement Documentation Requirements and Inservice Summary Report Preparation and Submission as Required by IWA-4000 and IWA-6000, Section XI, Division 1," as approved for use by Regulatory Guide 1.147, "Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1."

There are no regulatory commitments contained in this letter.

Should you have any questions regarding the information in this submittal, please contact Dennis Moore, Site Regulatory Assurance Manager, at (315) 349-5219.

Sincerely,

Mohamed N. Khan
Engineering Director, Nine Mile Point Nuclear Station
Exelon Generation Company, LLC

MNK/KJK

Attachment: Fourth Inservice Inspection Interval, Third Inservice Inspection Period
2017 Owner's Activity Report for RFO-24 Inservice Examinations

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NMP1 Owner's Activity Report for RFO-24

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

Attachment

Fourth Inservice Inspection Interval, Third Inservice Inspection Period
2017 Owner's Activity Report for RFO-24 Inservice Examinations



**FOURTH INSERVICE INSPECTION INTERVAL
THIRD INSERVICE INSPECTION PERIOD**

**2017 OWNER'S ACTIVITY REPORT
FOR
RFO-24 INSERVICE EXAMINATIONS**

Prepared For

Nine Mile Point Nuclear Station Unit 1

P.O. Box 63, Lake Road

Lycoming, New York 13093

Commercial Service Date: December 26, 1969

NRC Docket Number: 50-220

Document Number: NMP1-OAR-004-024

Revision Number: 00 Date: May 16, 2017

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RECORD OF REVISION			
REVISION No.	DATE	AFFECTED PAGES	REASON FOR REVISION
00	MAY 17, 2017	Entire Document	Initial issue of Owner's Activity Report for ASME Section XI Inservice Inspection, Containment Inservice Examinations, and Pressure Tests and Alternate Risk-Informed Inspection in accordance with the requirements of ASME Code Case N-532-4.

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ABSTRACT

ASME Section XI Code Case N-532-4 requires submission of the Owner's Activity Report to the regulatory and enforcement authorities having jurisdiction at the plant site within 90 calendar days of the completion of each refueling outage.

This Owner's Activity Report summarizes the results of the Nine Mile Point Nuclear Station (NMPNS), Unit 1, American Society of Mechanical Engineers (ASME) Section XI In-service Inspection, Risk-Informed Inspection, Containment In-service Examinations, and Pressure Tests performed during Refueling Outage Twenty-Four (RFO-24), from March 20, 2017 through April 6, 2017, and the First outage of the Third In-service Inspection Period that started on August 23, 2016 and is scheduled to end on August 22, 2019.

The attached Table 1 and 2 include flaws and conditions (those meeting the requirements of Code Case N-532-4) identified since the last Owner's Activity Report following Refueling Outage RFO-23.

As an alternate to the requirements of the ASME, Boiler and Pressure Vessel Code (B&PVC), Section XI, Article IWA-6000, NMPNS is implementing ASME Code Case N-532-4, Alternative Requirements to Repair and Replacement Documentation Requirements and In-service Summary Report Preparation and Submission as Required by IWA-4000 and IWA-6000, Section XI, Division 1". Regulatory Guide 1.147, Revision 16, approved ASME Code Case N-532-4 for use. This Report complies with the requirements of Code Case N-532-4 and the conditions identified in RG 1.147.


OWNER'S ACTIVITY REPORTS - FORM OAR-1

Owner's Activity Reports Form OAR-1's were prepared and certified upon completion of the Nine Mile Point Unit 1, 2017 refueling outage (RFO-24) examination activity in accordance with the following NMPNS inspection plans and schedules:

- NMP1-ISI-004, Fourth Ten-Year In-service Inspection Plan and Implementing Schedule, (includes the Alternate Risk-Informed Inspection Program
- NMP1-CISI-002, Second Containment In-service Inspection Plan and Implementing Schedule.
- NMP1-PT-003, Inservice Pressure Testing Program Plan


In addition to the Owner's Activity Report, Form OAR-1, the following Tables are also included:

- a. **Items with Flaws or Relevant Conditions that Require Evaluation for Continued Service**, Table 1, provides a listing of item(s) with flaws or relevant conditions that required evaluation to determine acceptability for continued service, whether or not the flaw or relevant condition was discovered during a scheduled examination or test, and provides such information as Examination Category, Examination Item Number, Item Description, Flaw Characterization (as required by IWA-3300).

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- b. **Abstract of Repairs, Replacements or Corrective Measures Required for Continued Service,** Table 2, identifies those items containing flaws or relevant conditions that exceeded Division 1 acceptance criteria shall be provided with the information and format of Table 2. This information is required even if the discovery of the flaw or relevant condition that necessitated the repair/replacement activity did not result from an examination or test required by Division 1. If the acceptance criterion for a particular item is not specified in Division 1, the provisions of IWA-3100(b) shall be used to determine which repair/replacement activities are required to be included in the abstract.

In accordance with ASME Section XI, IWB-2412(a), IWC-2412(a), IWD-2412(a), IWE-2412(a), and IWF-2410(b) and with the exception of the examinations that may be deferred until the end of the inspection interval as specified in Table IWB-2500-1, IWC-2500-1, IWD-2500-1, IWF-2500-1 and IWE-2500-1, including those examinations which NMPNS has requested and received approval in the form of relief request, the required examinations in each examination category have been completed for the First and Second In-service Inspection Period in accordance with Tables IWB-2412-1, IWC-2412-1, IWD-2412-1, IWE-2412-1, and IWF-2410-2.

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**FORM OAR-1
OWNER'S ACTIVITY REPORT**

As required by the provisions of the ASME Code Case N-532-4

Report Number: NMP1-OAR-004-024

Plant Nine Mile Point Nuclear Station, P. O. Box 63, Lycoming, New York 13093
(Name and Address of Plant)

Plant Unit 1 Commercial Service Date December 26, 1969 Refueling Outage Number RFO-24

Current Inspection Interval 4th Interval for ISI & PT, 2nd Interval for CISI August 23, 2009 to August 22, 2019
(1st, 2nd, 3rd, 4th, Other)

Current Inspection Period Third In-service Inspection Period August 23, 2016 to August 22, 2019
(1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the Inspection Plans 2004 Edition, No Addenda

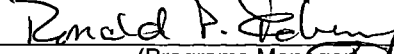
Date and Revision of Inspection Plans NMP1-ISI-004, Revision 03, June 30, 2016 (ISI), NMP1-CISI-002, Revision 02, August 1, 2016 (Containment ISI), NMP1-PT-003 Revision 05, January 8, 2015 (Pressure Test)

Edition and Addenda of ASME Section XI applicable to Repair/Replacement activities, if different than the Inspection Plan N/A (same Code Edition/Addenda)

Code Cases used: N-716, N-648-1, & N-642-4
(if applicable)

CERTIFICATE OF CONFORMANCE


I certify that (a) the statements made in this report are correct; (b) the examinations and tests meet the Inspection Plan as required by the ASME Code, Section XI; and (c) the repair/replacement activities and evaluations supporting the completion of RFO-24 conform to the requirements of Section XI.
(refueling outage number)

Signed  Date 5/16/2017
(Programs Manager)

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of PA and employed by The Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT. have inspected the items described in this Owner's Activity Report and state that to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair/replacement activities and evaluation described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

 Commissions PA 3036 NB 13855 A, N, I, C
Inspector's Signature National Board, State, Province, and Endorsements
Date 5/24/17



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TABLE 1

ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR CONTINUED SERVICE
As required by the provisions of the ASME Code Case N-532-4

EXAMINATION CATEGORY	ITEM NUMBER	ITEM DESCRIPTION	EVALUATION DESCRIPTION
B-N-2	B13.30	Reactor Vessel Interior Attachment Weld – Beyond Beltline Region (Steam Dryer Support Bracket)	<p>Repeat inspections were performed on four steam dryer support bracket vessel attachments to comply with the successive inspection requirements defined in IWB-2420(b). Relevant indications in the dryer support brackets exceeding the acceptance criteria of IWB-3520.2 were reported in the previous 2011, 2013 and 2015 NMP1 ISI Owner Activity Reports. Exelon re-inspected the four steam dryer support brackets during the Spring 2017 (N1R24) refueling outage using EVT-1 and a qualified UT tool and procedure. As in previous outages three brackets contained reportable UT and EVT-1 indications and one bracket contained only a reportable UT indication. The UT indications remain relatively shallow, continue to be located entirely within the bracket base metal and run parallel or away from the vessel attachment weld such that they are not considered a threat to propagate into and/or through the vessel attachment weld toward the vessel.</p> <p>The N1R24 UT data showed a small change in depth on one bracket indication as compared to N1R23, with the depth change of 0.14 being less than the UT depth sizing uncertainty of 0.394 inches documented in the BWRVIP-03 demonstration and remains bounded by the one-cycle crack growth depth of 0.375 inches assumed in the flaw evaluation. The UT data showed essentially no change in length, with the maximum change in length documented at 0.08 inches. This small length change is less than the minimum NDE uncertainty of 0.105 inches and remains bounded by the one-cycle crack growth length of 0.852 inches assumed in the flaw evaluation.</p> <p>Prior to the N1R23 re-inspections, NMP revised the previous Engineering Evaluation using the N1R22 UT/EVT-1 data to allow two-cycles of operation. The revised supporting Engineering Evaluation concluded that the indications are acceptable for continued service for at least two additional operating cycles. In accordance with IWB-3144(b) the Engineering Evaluation of the N1R23 examination results was submitted as an attachment to the 2015 Owner's Activity Report for RFO-23 Inservice Examinations (ML15191A385). The repeat UT/EVT-1 exams in three successive outages confirm the crack growth depth and length changes are well below the conservative growth rates used in the 2-cycle flaw evaluation. All flaws remain acceptable under the previously submitted flaw evaluation.</p>

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**END OF INSERVICE INSPECTION
OWNER'S ACTIVITY REPORT
FOR
REFUELING OUTAGE TWENTY-FOUR (RFO-24)**