Exelon Generation®

TMI-17-114
January 8, 2018

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

Three Mile Island, Unit 1
Renewed Facility Operating License No. DPR-50
NRC Docket No. 50-289

Subject: Three Mile Island Nuclear Station, Unit 1 T1R22 Refueling Outage Inservice Inspection (ISI) Owner's Activity Report and Attachments

The purpose of this letter is to provide the Three Mile Island Nuclear Station Owner's Activity Report (OAR-1) for Inservice Inspections as required by the American Society of Mechanical Engineers (ASME) Code, Section XI, 2004 Edition with no Addenda and ASME Code Case N-532-5 Repair/Replacement Activity Documentation Requirements and Inservice Summary Report Preparation and Submission – Section XI, Division 1.

Attachment 1 is the ISI Owner's Activity Report covering ISI activities associated with T1R22 Refueling Outage which started on September 18, 2017 and was the 2nd outage of the 2nd period of the 4th ISI inspection interval.

There are no commitments in this letter.

Should you have any questions concerning this letter, please contact Mr. Michael Fitzwater at (717) 948-8228.

Respectfully,

E. W. Callan
Site Vice President, Three Mile Island Unit 1
Exelon Generation Co., LLC

Attachment 1 – ISI Owner's Activity Report – T1R22 Outage

cc: USNRC, Regional Administrator, Region I
USNRC, Senior Project Manager, NRR
USNRC, Senior Resident Inspector, TMI
Roger R. Smith, The Hartford Steam Boiler Inspection and Insurance Company

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Attachment 1

ISI Owner's Activity Report – T1R22 Outage

FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number: T1R22

Plant: Three Mile Island Nuclear Station, Route 441 South, Londonderry Township, Middletown, PA 17057

Unit No: 1 (if applicable) Commercial service date: September 2, 1974 Refueling Outage No: T1R22

Current Inspection Interval: ISI = 4th / CISI = 2nd
(1st, 2nd, 3rd, 4th, other)

Current inspection period: ISI = 2nd / CISI = 2nd
(1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the inspection plans: 2004 Edition with No Addenda

Date and revision of inspection plans: 10/27/2015 Rev. 3A; 10/03/2016, Rev. 4; 9/14/2017, Rev. 4A

Edition and Addenda of Section XI applicable to repair/replacement activities, if different than the inspection plans

N/A

Code Cases used for inspection and evaluation: N-432-1, N-460, N-504-4, N-508-4, N-513-3, N-516-3, N-517-1, N-526, N-528-1, N-532-5, N-552, N-557-1, N-561-2, N-562-2, N-566-2, N-569-1, N-586-1, N-593, N-597-2, N-600, N-613-1, N-619, N-624, N-629, N-638-4, N-639, N-641, N-643-2, N-648-1, N-651, N-661-1, N-661-2, N-665, N-666, N-686-1, N-695, N-696, N-705, N-706-1, N-722-1, N-729-4, N-731, N-733, N-735, N-739, N-739-1, N-751, N-753, N-770-2, N-773, N-786, and N-789
(if applicable, including cases modified by N-532 and later revisions)

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 T1R22 (refueling outage number) conform to the requirements of Section XI.

Signed Mark Weis, Fleet ISI Program Owner Date 1/5/2018
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by The Hartford Steam Boiler Inspection and Insurance Company 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 personnel injury or property damage or a loss of any kind arising from or connected with this inspection.

Roger Smith Commission NB13328 ANI
Inspector's Signature (National Board Number and Endorsement)

Date 1/5/2018

Table 1
Items with Flaws or Relevant Conditions That Required Evaluation for Continued Service

Examination Category and Item Number	Item Description	Evaluation Description
E-A, E1.30 / E-A, E4.11	Containment liner moisture barrier region	Partial separation of moisture barrier and surface rust were evaluated as acceptable for one cycle (reference issue report 04058749).
E-A, E1.11	Containment liner 281-305, Containment liner 305-326, Containment Liner 346-436	Minor rust not reducing remaining liner thickness and degraded coating areas were evaluated as acceptable. (reference issue reports 4059230, 4055816, 4055267, 4055131, 4054683, and 2583685)
F-A, F1.20	Support DHH0133Support	Misalignment and spring can settings evaluated as acceptable. (Reference issue report 4059311)
F-A, F1.20	Support MUH0104Support	Spring can settings, bent rod, and bolted connection conditions evaluated as acceptable.
F-A, F1.40	Steam Generator RCH0001ARCH1A1Support (Support skirt anchor bolting)	Loose anchor bolting was tightened and expanded examination scope to RCH0001BRCH1B1. (reference issue report 4055111)
F-A, F1.40	Steam Generator RCH0001BRCH1B1Support (Support skirt anchor bolting)	Loose anchor bolting was tightened. (reference issue report 4056688)
D-A, D2.10	Valve CA-V-173	Body to bonnet leak evaluated as acceptable and cleaned subsequent to discovery.
B-P, B15.10	Valve MU-V-1A	Packing boron deposit cleaned and verified no active leakage after cleaning.
B-P, B15.10	Valve RC-V-17	Packing boron deposit cleaned, packing adjusted, and verified no active leakage after cleaning.
B-P, B15.10	Valve RC-V-21	Packing boron deposit cleaned and verified no active leakage after cleaning.
C-H, C7.10	Valve MU-V-12	Packing boron deposit verified no active leakage and evaluated as acceptable.
C-H, C7.10	Valve DH-V-38B	Body to bonnet boron deposit cleaned and verified as inactive and acceptable after cleaning.
C-H, C7.10	Temperature Element DH6-TE-2	Threaded connection boron deposit inactive and evaluated as acceptable.
C-H, C7.10	Valve SF-V-19	Packing and body to bonnet boron deposits. Valve cleaned and packing adjusted.
C-H, C7.10	24" Flange at Borated Water Storage Tank	Boric acid deposit at flanged connection cleaned and evaluated as acceptable.
C-H, C7.10	Pump BS-P-1A	Seal dried boron deposit evaluated as acceptable.
C-H, C7.10	Valve MU-V-1040	Two drops per minute packing leak evaluated as acceptable.
B-P, B15.10	MU9-FE-4	Dry white boron at tubing connection cleaned and fitting tightened.

Table 1 (continued)
Items with Flaws or Relevant Conditions That Required Evaluation for Continued Service

Examination Category and Item Number	Item Description	Evaluation Description
N/A	NR-V-22C (ISI Class 3)	A CMTR for valve NR-V-22C was not provided with the purchase order. A CMTR is required as part of the owner's requirements. The valve material was verified to be correct using a material analyzer gun. The vendor was contacted, however a CMTR has not been provided. Necessary corrective actions are documented in Issue Report 04089302.

Table 2
Abstract of Repair/Replacement Activities Required for Continued Service

Code Class	Item Description	Description of Work	Date Completed	Repair/Replacement Plan Number
3	Strainer CA-S-8A	Replaced bolting due to boric acid wastage.	04/05/2016	2600901-12, WO 4355815 (R2238962)
3	Piping adjacent valve NRV-53A	Replaced piping adjacent valve NR-V-53A due to corrosion.	12/18/2017	2600901-21, WO 4193059 (M2415227)
1	Reactor Coolant Pump RC-P-1A Hi Pressure Tap Nozzle	Removed existing High Side Pressure Tap Nozzle and installed a plug due to through wall flaw in pressure tap.	2/24/2017	2600901-24, WO 4574579
3	24" Pipe Upstream valve NR-V-8D	Replaced piping in area that was evaluated acceptable per Code Case N-513-3 during Operating Cycle 21.	9/23/2017	2600901-44, WO 4187450
1	Steam Generator RC-H-1B Tubing	Plugged and stabilized defective tubes with mechanical plugs.	12/05/2017	2600901-72, WO 4376261