Exel<sup>4</sup>n<sup>a</sup> Nuclear

Telephone 717-948-8000

Three Mile Island Unit 1 Route 441 South, P.O. Box 480 Middletown, PA 17057

ASME Code, Section XI 10CFR50.55a

February 20, 2012

TMI-12-016

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

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

Subject: Three Mile Island Nuclear Station, Unit 1 T1R19 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, 1995 Edition with 1996 Addenda, ASME Section XI 2004 Edition with no Addenda, and ASME Code Case N-532-4 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 T1R19 Refueling Outage which started on October 24, 2011, and was the last outage of the third period of the 3rd ISI inspection interval and the first outage of the first period of the 4<sup>th</sup> ISI inspection interval.

If you should have any questions, please contact the Three Mile Island ISI Coordinator, Gene Navratil at 717-948-8716.

Sincerely,

ul an

R. W. Libra Site Vice President, Three Mile Island Unit 1 Exelon Generation Co., LLC

Enclosures:

Attachment 1 – ISI Owner's Activity Report – T1R19 Outage

cc: USNRC, Regional Administrator, Region I USNRC, Senior Project Manager, NRR USNRC, Senior Resident Inspector Gary Gustofson, Hartford Steam Boiler I&I Co. of CT

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T1R19 Refueling Outage Inservice Inspection (ISI) Owner's Activity Report

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Attachment 1

ISI Owner's Activity Report – T1R19 Outage

### Attachment 1 Three Mile Island, Unit No. 1 – 1R19 OAR REPORT

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

Report Number 1R19 Plant: Three Mile Island Nuclear Station, 2625 River Road, Middletown, PA 17057 Commercial Service Date: September 2, 1974 Unit No: 1 Refueling Outage No: T1R19 Current Inspection Interval: ISI = 3<sup>rd</sup> & 4<sup>th</sup> / CISI = 1<sup>st</sup> & 2<sup>nd</sup> Current Inspection Period: ISI = 3<sup>rd</sup> for 3<sup>rd</sup> Interval & 1<sup>st</sup> for 4<sup>th</sup> Interval / CISI = 3<sup>rd</sup> for 3<sup>rd</sup> Interval & 1<sup>st</sup> for 4<sup>th</sup> Interval Edition and Addenda of Section XI Applicable to the inspection plans: 1995 Edition through 1996 Addenda for ISI 3<sup>rd</sup> Interval & CISI 1<sup>st</sup> Interval. 2004 Edition with no Addenda for the 4th ISI Interval & 2<sup>nd</sup> CISI Interval 11/4/10, Rev 9 for 3rd ISI & 1st CISI Interval & 3/11/11, Rev 0 for 4th ISI Date and revision of inspection plan Interval and 2<sup>nd</sup> CISI Interval Edition & Addenda of Section XI applicable to repairs and replacements, if different than the inspection plans; 1995 Edition with 1996 Addenda through April 19, 2011 & 2004 Edition with no Addenda for 4/20/11 & later. Code Cases used: N-416-3, N-460, N-491-2, N498-4, N-504-2, N-517-1, N-522, N-523-2, N-526, N-528-1, N-532-4, N-533-1, N-537, N-545, N-546, N-566-2, N-583, N-600, N-613-1, N-624, N-638-1, N-639, N-643, N-643-2, N-652, N-665, N-685, N-695, N-696, N-686, N-686-1, N-700, N-706, N-706-1, N-722, N-729-1, N-731,

N-735, N-739, N-751, N-753.

#### **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, T1R19 conform to the requirements of Section XI.

Signed: Dane Namo Gene Navratil, ISI Program Owner Date 02/02/2012 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 the State or Province of Pennsylvania and employed by Hartford Steam Boiler Inspection and Insurance Company of Connecticut 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 arjsing from or connected with this inspection.

inspector's Signature

Commissions:

13855 ANI

PA 3036 National Board, State, Province, and Endorsements

Date: 02/02/2012

# TABLE 1

# ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR CONTINUED SERVICE

| Examination<br>Category | Examination Item Number          | Item Description                                                                      | Evaluation Description                                                                                                   |
|-------------------------|----------------------------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| F-A                     | F1.30                            | Support COE0007                                                                       | Pipe in contact with box restraint<br>evaluated as acceptable under IR<br>1255909.                                       |
| F-A                     | F1.20                            | Snubber SPSE0010                                                                      | Loose pipe clamp bolt evaluated as acceptable under IR 1275230.                                                          |
| F-A                     | F1.20                            | Support MS0067                                                                        | Bolt thread engagement evaluated as acceptable under IR 1280879.                                                         |
| F-A                     | F1.20                            | Support EF0024                                                                        | Support travel setting evaluated as acceptable under IR 1282745.                                                         |
| F-A                     | F1.20                            | Support EF0025                                                                        | Support travel setting evaluated as acceptable under IR 1282745.                                                         |
| F-A                     | F1.20                            | Snubber MS0214                                                                        | Snubber piston setting evaluated as acceptable under IR 1285625.                                                         |
| F-A                     | F1.10                            | Support MU01455                                                                       | Bent hanger rod evaluated as acceptable under IR 1286004.                                                                |
| F-A                     | F1.10                            | Snubber MUE0043                                                                       | Snubber bolt thread engagement<br>evaluated as acceptable under IR<br>1286507.                                           |
| F-A                     | F1.10                            | Support RC0002                                                                        | Bent hanger rod evaluated as acceptable under IR 1289704.                                                                |
| F-A                     | F1.10                            | Snubber RC0005                                                                        | Snubber piston setting evaluated as acceptable under IR 1289611.                                                         |
| С-Н                     | C7.10<br>C7.30<br>C7.50<br>C7.70 | System Leakage Test In<br>Make-Up and Purification<br>System (Work Order<br>R2124159) | Boric acid deposits observed at<br>mechanical joints and accepted under<br>IR's 238636, 1100558, 946760, and<br>1139763. |
| D-B                     | D2.10<br>D2.30<br>D2.50<br>D2.70 |                                                                                       |                                                                                                                          |
| B-P<br>C-H              | B15.10<br>C7.10                  | System Leakage Test In<br>Make-Up and Purification<br>System (Work Order<br>R2152126) | Boric acid deposits observed at<br>mechanical joints and accepted under<br>IR's 1280461 and 1280462.                     |
| С-Н                     | C7.10                            | System Leakage Test In<br>Make-Up and Purification<br>System (Work Order<br>R2156159) | Boric acid deposits observed at mechanical joints and accepted under IR's 1033510 and 1292277.                           |
| C-H                     | C7.10<br>C7.30<br>C7.50<br>C7.70 | System Leakage Test in<br>Decay Heat Removal<br>System (R2134124)                     | Boric acid deposit observed at mechanical joint and accepted under IR 1126043.                                           |

### Attachment 1 Three Mile Island, Unit No. 1 – 1R19 OAR REPORT

# TABLE 1 (Continued)

## ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR CONTINUED SERVICE

| Examination<br>Category | Examination<br>Item Number | Item Description       | Evaluation Description                |
|-------------------------|----------------------------|------------------------|---------------------------------------|
| С-Н                     | C7.10                      | System Leakage Test in | Boric acid deposits observed at       |
|                         |                            | Core Flood System      | mechanical joints and accepted under  |
|                         |                            | (R2138474)             | IR's 1280456 and 1280480.             |
| B-P                     | B15.10                     | System Leakage Test in | Boric acid deposits observed at       |
|                         |                            | Class 1 Components     | mechanical joints and accepted under  |
|                         |                            | (R2156771)             | IR's 1294265, 1294251, 1294252,       |
|                         |                            |                        | 1294253, 1294254, 1294256, 1294264,   |
|                         |                            |                        | 1294214, 1294266, 1294258, 1294259,   |
|                         |                            |                        | 1294261, 1294262, and 1294211.        |
| C-H                     | C7.30                      | System Leakage Test in | Leakage observed at mechanical joints |
|                         | C7.70                      | Nuclear Services Close | and accepted under IR's 987240,       |
| D-B                     | D2.10                      | Cooling Water System   | 314570, and 933616.                   |
|                         | D2.30                      | (R2086383)             |                                       |
|                         | D2.50                      |                        |                                       |
|                         | D2.70                      |                        |                                       |

#### TABLE 2

#### ABSTRACT OF REPAIR / REPLACEMENT ACTIVITIES REQUIRED FOR CONTINUED SERVICE

| Code<br>Class | Item Description                  | Description of Work              | Date<br>Completed | Repair /<br>Replacement<br>Plan Number |
|---------------|-----------------------------------|----------------------------------|-------------------|----------------------------------------|
| 3             | Strainer CA-S-8B                  | Installed new cover bolting.     | 07/15/2010        | R2124407                               |
| 3             | Piping fabrication<br>weld MU57b5 | Installed mechanical pipe clamp. | 12/14/2010        | C2024596                               |
| 3             | Piping fabrication weld MU57b5    | Replaced piping weld.            | 01/25/2012        | C2024595                               |
| 2             | Relief valve MS-V-<br>21A         | Replaced relief valve.           | 01/26/2012        | C2026480                               |
| 1             | Snubber RC0102                    | Replaced snubber.                | 01/26/2012        | R2043988                               |
| 2             | Relief valve MS-V-<br>18A         | Replaced relief valve.           | 01/26/2012        | R2002964                               |
| 1             | Steam Generator<br>RC-H-1B        | Plugged and stabilized tubes.    | 02/01/2012        | R2117327                               |