



Exelon Generation Company, LLC  
Braidwood Station  
35100 South Route 53, Suite 84  
Braceville, IL 60407-9619

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December 15, 2021  
BW210083

10 CFR 50.55a(g)

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

Braidwood Station, Unit 1  
Renewed Facility Operating License No. NPF-72  
NRC Docket No. STN 50-456

Subject: Braidwood Station, Revision to Unit 1 Inservice Inspection Summary Report

Reference: Letter from M. Marchionda Palmer (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, " Braidwood Station, Unit 1 Inservice Inspection Summary Report" dated January 17, 2020.

Enclosed please find the revision to post-outage summary report for Inservice Inspection (ISI) examinations conducted prior to and during Braidwood Station, Unit 1 Refueling Outage 21 (A1R21). This report is submitted in accordance with the requirements of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, "Rules for the Inservice Inspection of Nuclear Power Plant Components," and ASME Code Case N-532-5, "Repair/Replacement Activity Documentation Requirements and Inservice Inspection Summary Report Preparation and Submission – Section XI, Division 1."

Attachment 1 has been revised from the original report (Reference 1) to provide the Owner's Activity Report (OAR) for ISI activities conducted prior to and during A1R21 including a list of items with flaws or relevant conditions that required evaluation for continued service, and an abstract of repair/replacement activities required for continued service. Note 1 has been included for the clarification of the revision.

Please direct any questions you may have regarding this submittal to Mr. Richard Schliessmann, acting Regulatory Assurance Manager, at (815) 417-2820.

Keenan, John P.

Digitally signed by Keenan, John P.  
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John Keenan  
Site Vice President  
Braidwood Station

Attachment:

1. Owner's Activity Report (OAR) for A1R21

cc: Regional Administrator - NRC Region III  
NRC Senior Resident Inspector - Braidwood Station  
NRR Project Manager - Braidwood Station  
Illinois Emergency Management Agency - Division of Nuclear Safety

**ATTACHMENT 1**

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

**TABLE 1, ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT  
REQUIRED EVALUATION FOR CONTINUED SERVICE**

**TABLE 2, ABSTRACT OF REPAIR/REPLACEMENT ACTIVITIES  
REQUIRED FOR CONTINUED SERVICE**

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

Report Number A1R21

Plant Braidwood Generating Station, 35100 South Route 53, Suite 84, Braceville, Illinois 60407

Unit No. 1 Commercial Service Date July 29, 1988 Refueling Outage Number A1R21  
(if applicable)

Current Inspection Interval Fourth Inspection Interval (ISI), Third Inspection Interval (Containment ISI)  
(1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, other)

Current Inspection Period First Inspection Period (ISI and Containment ISI)  
(1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>)

Edition and Addenda of Section XI applicable to the Inspection Plans ASME Section XI 2013 Edition, No Addenda

Date and Revision of Inspection Plans October 9<sup>th</sup>, 2018 / Rev. 0;

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

Code Cases used: N-513-4, N-532-5, N-639, N-729-4, N-731, N-747,

**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 A1R21 conform to the requirements of Section XI (refueling outage number)

Signed Maulik Shah / [Signature] Date 12/02/2021  
(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 of Hartford, 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 arising from or connected with this inspection.

James W. Newery / [Signature] Commission NB 11622 INR 1L017431C  
(Inspector's Signature) (National Board Number and Endorsement)

Date 2 DEC 2021

**TABLE 1**

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

| <b>Examination Category</b> | <b>Examination Item Number</b> | <b>Item Description</b>  | <b>Evaluation Description</b> |
|-----------------------------|--------------------------------|--------------------------|-------------------------------|
|                             |                                |                          | **Note 1**                    |
| (C-C)                       | C3.20                          | Lug Attach for 1MS07002C | 1MS-07-SW08 (EC-374961)       |

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          | 1DG5048A         | Replace valve, valve is hard to open.  | 04/06/2019     | WO # 4624252-01<br>(Plan 1-19-001)                      |
| 2          | 1FW035B          | Replace valve plug retaining ring per IR 2731940                                       | 10/11/2019     | WO # 4606972-01<br>(Plan 1-19-009)                      |
| 3          | 1CC9520B         | Disc and Bushing O-ring needed replaced per IR 4225422.                                | 3/15/2019      | WO # 1942260-01<br>(Plan 1-19-012)                      |
| 2          | 1AF014G          | Exiting valve replaced due to "As Found" test failure per IR 4289020                   | 10/18/2019     | WO # 4755065-01<br>(Plan 1-19-058)                      |
| 2          | 1AF014C          | Exiting valve replaced due to "As Found" test failure per IR 4289127                   | 10/18/2019     | WO # 4755066-01<br>(Plan 1-19-059)                      |
| 3          | 0WO01CB          | Replace 2 degraded fasteners on the west condenser head per IR 4297028                 | 11/16/2019     | WO # 01631000-39<br>(Plan 1-19-061)                     |
| 2          | 1SI02003S        | Snubber did not meet functional test criteria and requires replacement. Per IR 4287321 | 10/14/2019     | WO # 4835025-82<br>(Plan 1-19-055)                      |
| 1          | 1RC02006S-B      | Snubber did not meet functional test criteria and requires replacement per IR 4287143  | 10/18/2019     | WO # 4835025-28<br>(Plan 1-19-053)                      |
| 1          | 1RC02006S-A      | Snubber did not meet functional test criteria and requires replacement per IR 4287141  | 10/17/2019     | WO # 4835025-26<br>(Plan 1-19-052)                      |
| 2          | 1CV41036S        | Degraded snubber requires replacement per IR 4286524                                   | 10/14/2019     | WO # 4835025-22<br>(Plan 1-19-050)                      |
| 1          | 1CV16034V        | Variable Spring Can found out of tolerance per IR 4287731                              | 10/19/2019     | WO # 4970350-01<br>Corrective Measure<br>(1WF3122.2(a)) |
| 2          | 1FW05024C        | Constant Spring Can found out of tolerance per IR 4287727                              | 10/19/2019     | WO # 4970362-01<br>Corrective Measure<br>(1WF3122.2(a)) |

**\*\* Note 1\*\***

IR 4454067 has been generated to update Table 1 to remove Code Case N-513 for line 1SX93AB, as UT results from the original inspection were above new calculated minimum wall thickness. Therefore, Code Case N-513 was not used to evaluate the flaw.