Southern Nuclear

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U. S. Nuclear Regulatory Commission
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Washington, D. C. 20555-0001

Joseph M. Farley Nuclear Plant – Unit 2
Inservice Inspection Program Owner's Activity Report for Outage 2R27

Ladies and Gentlemen:

The ASME Section XI Code Case N-532-5 OAR-1 Owner's Activity Report for the 2R27 Refueling Outage is provided as an enclosure to this letter. The OAR-1 Report in the enclosure includes the OAR-1 Form, as well as Table 1, "Items with Flaws or Relevant Conditions That Required Evaluation for Continued Service," which lists evaluations performed for continued service, and Table 2, "Abstract of Repair / Replacement Activities Required for Continued Service," which lists repair/replacement activities.

This report is for the first period of the 5th Interval ISI activities (Interval 5, Period 1, Outage 2).

This letter contains no NRC commitments. If you have any questions, please contact Jamie Coleman at 205.992.6611.

Respectfully submitted,

Cheryl A. Gayheart
Regulatory Affairs Director
CAG/dsp/cbg

Enclosure: 2R27 Form OAR-1 Owner's Activity Report

cc: Regional Administrator, Region ll
NRR Project Manager – Farley Nuclear Plant
Senior Resident Inspector – Farley Nuclear Plant
RTYPE: CFA04.054

Joseph M. Farley Nuclear Plant – Unit 2
Inservice Inspection Program Owner's Activity Report for Outage 2R27

Enclosure

2R27 Form OAR-1 Owner's Activity Report

FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number 2-5-1-2 (Unit 2, 5th Interval, 1st Period, 2nd Report)

Plant Joseph M. Farley Nuclear Plant

Unit No. 2 (if applicable) Commercial service date December 01, 1977 Refueling outage no. 2R27

Current inspection interval 5th (1st, 2nd, 3rd, 4th, other)

Current inspection period 1st (1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the inspection plans: The 2007 Edition through 2008 Addenda is applicable to the 5th Inspection Interval.

Date and revision of inspection plans: 5th Inspection Interval Inspection Plans - Volume 1- 10/11/2020 (Version 5.0), Volume 3 – 10/9/2020 (Version 3.0), Volume 4 – 8/1/2019 (Version 2.0), and Volume 5 – 12/19/2019 (Version 2.0). 2R27 Outage Plan – 10/8/2020 (Version 1.0) with 2R27 Outage Plan Scope Change SC-004 - 11/20/2019

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

Code Cases used for inspection and evaluation: N-716-1, N-722-1, N-776, N-513-4, N-532-5, N-648-2, and N-770-5 (if applicable, including cases modified by Case 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 2R27 (refueling outage number) conform to the requirements of Section XI.

Signed R. M. McAdams Engineering Director Date 02/04/2021
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, 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.

Rodney Senn Commission 12603 C I N R
Inspector's Signature (National Board Number and Endorsement)

Date 02/05/2021

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

Examination Category and Item Number	Item Description	Evaluation Description
D-B D2.10	Service Water leak on 2A Service Water Pump vent line. There was a through wall leak identified upstream of the vacuum breaker Q2P16V580 and vent valve Q2P16V585. The leak was too small to be measurable. The leak location is on the bottom side of the piping where it contacts the pipe support.	CR 10633466 documents the evaluation for operability, resulting in Operable But Degraded / Non-conforming due to the leak on ASME Class 3 piping. The location was isolated until the piping was replaced by work order SNC1038624.
D-B D2.10	A through-wall leak was discovered on a 6 inch diameter piping portion of the 2C Service Water pump mini-flow line approximately 3 inches downstream of mini-flow isolation valve Q2P16V575. The leak rate could not be measured but is described as very small (the affected pipe had a wet spot, but no drops were observed during the visual inspection period; <1 dpm)	CR 10633640 documents the evaluation for operability, resulting in Operable But Degraded / Non-conforming due to the leak on ASME Class 3 piping. The location was isolated until the piping was replaced by work order SNC930315.
D-B D2.10	A through-wall leak was noted on the 2A Residual Heat Removal (RHR) Engineered Safeguards Feature (ESF) Room Cooler Q2E16H003A Service Water piping return line located in the 2A RHR Pump Room. The (approximately 1 drop every 8 minutes) pinhole leak is coming from the weld material adjacent to the flange upstream of Q2P16V021A.This was identified during the ISI pressure test 160.27-2.	CR 10739161 documents the evaluation for operability, resulting in the 2A RHR Room Cooler being declared Inoperable and the Unit 2 Service Water declared Operable But Degraded / Non-conforming due to the leak on ASME Class 3 piping. The location was isolated and repaired by work order SNC1118151.
D-B D2.10	A through-wall leak was noted on the Service Water return piping from the 2B Diesel Generator near the flange upstream of valve Q1P16V593. This was identified during the Unit 2 ISI pressure test 160.28-3.	CR 10742390 documents the evaluation for operability, reference PDO 2-20-01. The flaw was evaluated in accordance with Code Case N-513-4, reference Request for Engineering Review (RER) SNC1121545-01, and the impacted piping was replaced by work order SNC1121637.

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	2" Service Water piping upstream of the 2A pump vacuum breaker Q2P16V580 and vent valve Q2P16V585	Replaced section of leaking Service Water piping.	8/29/2019	SNC1038624
3	6" Service Water piping of the 2C Service Water pump mini-flow line approximately 3 inches downstream of mini-flow isolation valve Q2P16V575. Note that during repair, valve Q2P16V578 weld end wall thickness was found out of design tolerance, reference CR 10750014	Replaced section of leaking Service Water piping and valve Q2P16V578.	11/10/2020	SNC930315 and SNC1125762
3	1-1/2" 2A RHR ESF Room Cooler Q2E16H003A Service Water piping return line located in the 2A RHR Pump Room.	Replaced flange and weld due to pinhole leak.	9/17/2020	SNC1118151
3	8" Service Water return piping from the 2B Diesel Generator near the flange upstream of valve Q1P16V593.	Replaced section of leaking Service Water piping.	11/6/2020	SNC1121637