

2020-116 _____ BWR Vessel & Internals Project (BWRVIP)

(via e-mail)

December 17, 2020

Document Control Desk
U. S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852

Attention: Mr. Thomas Wengert

Subject: Cooper 300° Surveillance Capsule Location

References: 1. BWRVIP-86, Revision 1-A: BWR Vessel and Internals Project (BWRVIP), Updated BWR Integrated Surveillance Program (ISP) Implementation Plan, EPRI, Palo Alto, CA: 2012. 1025144.

2. NUREG-1944, "Safety Evaluation Report Related to the License Renewal of Cooper Nuclear Station," Docket No. 50-298, Nebraska Public Power District, October 2010.

The purpose of this letter is to inform the NRC that the Cooper Nuclear Station (CNS) 300° reactor pressure vessel (RPV) surveillance capsule was removed from the reactor during the refueling outage in October 2020. The capsule is being temporarily stored in the spent fuel pool at the facility.

The CNS 300° surveillance sample holder assembly was removed from the RPV inner wall as a planned evolution during the fall 2020 refueling outage to provide access to a core shroud vertical weld for examination. Several attempts to reinstall the RPV surveillance sample holder were made but were unsuccessful. Consequently, the decision was made by the licensee to postpone reinstallation until the next refueling outage. This decision was made by the licensee to not reinstall the surveillance specimen holder until the next refueling outage to avoid damaging the sample holder as a result of excessive forces needed to reengage the specimen holder with the RPV attachment brackets utilizing existing installation equipment. Actions are being taken and tracked in the CNS corrective action program to ensure reinstallation of the CNS 300° surveillance sample holder assembly during the next refueling outage in the fall of 2022.

The BWRVIP program managers for the ISP at EPRI were contacted regarding the inability to reinstall the surveillance capsule sample holder prior to the reactor reassembly process. The CNS 300° capsule is included in the ISP for the BWR fleet as defined in BWRVIP-86, Revision

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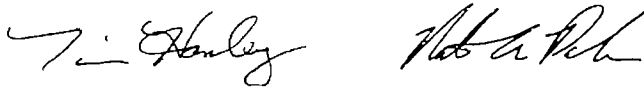
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1-A [Reference 1]. Table 7-1 shows the CNS 300° capsule withdrawal to be performed in 2029. CNS refueling outages are currently performed in even years, and CNS informed the BWRVIP that after the 300° capsule is reinstalled for the required additional irradiation exposure time, the withdrawal will be planned for the fall 2030 refueling outage. According to Section 4.2 of BWRVIP-86 Revision 1-A, capsules will be withdrawn in the years indicated in the withdrawal schedule, plus or minus one year. The projected capsule fluence at the time of withdrawal in 2030 is expected to remain unchanged if the reinstallation of the surveillance capsule holder is successful in fall 2022. Therefore, a 2030 withdrawal of the CNS 300° capsule will be within the NRC approved ISP program requirements.

The capsule will remain in the spent fuel pool for the current 2-year cycle of operation until the next refueling outage in fall 2022. Cooper will retain the capsule in the spent fuel pool and ensure the capsule is maintained in a condition to allow re-installation. These actions meet the intent of NUREG-1944 [Reference 2], Section 3.1.2.2.3, item (2) which states, in part, that the licensee's program "includes recommendations for maintaining untested capsules in storage for future reinsertion." In conclusion, the actions taken by CNS continue to meet the requirements of the Cooper Nuclear Station's Renewed Facility Operating License, the BWRVIP ISP implementation plan and 10 CFR Part 50, Appendix H, "Reactor Vessel Surveillance Program Requirements."

If you have any questions on this subject, please contact Steve Williams (BWRVIP ISP Project Manager) by email at swilliams@epri.com or by telephone at 704.574.5386.

Sincerely,



Nathan Palm, EPRI, BWRVIP Program Manager
Tim Hanley, Exelon, BWRVIP Executive Committee Chairman

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