



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

April 11, 2023

Mr. Terry J. Brown
Site Vice President
Energy Harbor Nuclear Corp.
Mail Stop P-DB-3080
5501 North State Route 2
Oak Harbor, OH 43449-9760

**SUBJECT: DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1 – REVIEW OF THE
SPRING 2022 STEAM GENERATOR TUBE INSPECTION REPORT
(EPID L-2022-LRO-0115)**

Dear Mr. Brown:

By letter dated September 29, 2022 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22272A497), as supplemented by letter dated March 1, 2023 (ML23060A077), Energy Harbor Nuclear Corp. (Energy Harbor, the licensee) submitted information summarizing the results of the spring 2022 steam generator (SG) tube inspections for the Davis-Besse Nuclear Power Station, Unit No. 1 (Davis-Besse). The U.S. Nuclear Regulatory Commission (NRC) staff summarized a conference call regarding this inspection in a letter dated March 30, 2022 (ML22088A197).

The NRC staff has completed its review of the information provided and concludes that Energy Harbor provided the information required by the Davis-Besse, Unit No. 1, technical specifications and that no follow-up is required at this time. A summary of the NRC staff's review is enclosed.

T. Brown

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If you have any questions, please contact me at 301-415-0272 or via email at Lucas.Haeg@nrc.gov.

Sincerely,

/RA/

Lucas E. Haeg, Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-346

Enclosure:
As stated

cc: Listserv

REVIEW OF THE SPRING 2022 STEAM GENERATOR TUBE INSPECTION REPORT

ENERGY HARBOR NUCLEAR CORP.

DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1

DOCKET NO. 50-346

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Davis-Besse, Unit No. 1, has two once-through SGs designed by Babcock and Wilcox that were installed in 2014. Each SG contains 15,607 thermally treated Alloy 690 tubes. The tubes were hydraulically expanded for part of the length of the tubesheet and are supported by 16 carbon steel tube support plates (TSPs). There are 66 stainless-steel tie rods between each TSP. Tube support plate 15S is below the auxiliary feedwater nozzle and has drilled holes in the periphery through which the tubes pass. The remaining portion of TSP 15S and the other TSPs in the SGs have trefoil broached holes. The trefoil holes of the even numbered TSPs are offset from centerline to minimize tube wear at the TSP elevations.

The licensee provided the scope, extent, methods, and results of their SG tube inspections. In addition, the licensee described corrective actions, such as tube plugging, taken in response to the inspection findings.

Based on the review of the information provided, the NRC staff has the following observations and comments:

- The licensee plugged 14 tubes in SG 2A and 1 tube in SG 1B due to wear at broached TSPs. An additional 28 tubes were preventively plugged due to bobbin probe proximity indications between the lower tubesheet and first TSP. There was no tube degradation detected at the location of the proximity indications.
- The licensee stated that to allow for secondary-side deposit mapping of the tube bundle and historical deposit tracking, all bobbin probes were run through a deposit calibration standard, and a sample of tubes was inspected full-length with array probes.

Based on a review of the information provided, the NRC staff concludes that the licensee provided the information required by the Davis-Besse, Unit No. 1, technical specifications. In addition, the NRC staff concludes that there are no technical issues that warrant additional follow-up action at this time, since the inspections appear to be consistent with the objective of detecting potential tube degradation and the inspection results appear to be consistent with industry operating experience at similarly designed and operated units.

Enclosure

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SPRING 2022 STEAM GENERATOR TUBE INSPECTION REPORT
(EPID L-2022-LRO-0115) DATED APRIL 11, 2023

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