**From:** Arora, Surinder
**Sent:** Wednesday, July 13, 2022 8:02 AM
**To:** Mathews, Mitchel A:(Constellation Nuclear)
**Cc:** Salgado, Nancy
**Subject:** DRAFT RAI RE: Dresden 2 and 3 Proposed Alternative related to SBLC nozzle inspection for the Sixth Inservice Inspection Interval (EPID L-2022-LLR-0037)

By letter dated March 25, 2022, Constellation Energy Generation, LLC, (Constellation) submitted an alternative for inspection of standby liquid control nozzle inner radius at Dresden Nuclear Power Station, Units 2 and 3. The Nuclear Regulatory Commission (NRC) staff has determined that additional information is required to complete its review of the proposed alternative. This email includes NRC staff's DRAFT request for additional information (RAI). If Constellation requires clarification of the included DRAFT RAI, please contact me to set up a discussion with the NRC staff. If no clarification is required then this DRAFT RAI will be considered a formal RAI and a 30 day response from the date of this e-mail would be expected. Thanks,

Surinder Arora, PE
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NRR/DORL/LPL3
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301-415-1421

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DRAFT REQUEST FOR ADDITIONAL INFORMATION

REQUEST FOR ALTERNATIVE

REGARDING AMERICAN SOCIETY OFMECHANICAL ENGINEERS,

BOILER AND PRESSURE VESSEL CODE, SECTION XI

EXAMINATION REQUIREMENTS FOR CLASS 1 NOZZLE INNER RADIUS

DOCKET NOS. 50-237 AND 50-249

DRESDEN NUCLEAR POWER STATION UNITS 2 AND 3

EPID NOS. L-2022-LLR-0037

By letter dated March 25, 2022 (Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML22084A615), Constellation Energy Generation, LLC (the licensee) requested U.S. Nuclear Regulatory Commission (NRC) approval of alternative I6R-01 pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(z)(2) to the requirements of American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) at Dresden Nuclear Power Station Units 2 and 3 (Dresden 2 and 3). The proposed alternative would allow the licensee to forego American Society of Mechanical Engineers (ASME) Code, Section XI-required examination of the standby liquid control (SBLC) nozzle inner radius (IR) for the sixth inservice inspection interval (ISI) of the subject units.

Specifically, pursuant to Title 10 of the Code of Federal Regulations (10 CFR), Part 50, Paragraph 50.55a(z)(2), the licensee proposed to perform a VT-2 visual examination and monitor the technical specification surveillance requirement 3.4.4.1 for reactor coolant leakage instead of the required ultrasonic examination. 10 CFR 50.55a(z)(2) requires the licensee to demonstrate that conforming to the

examination requirement would result in a hardship or unusual difficulty without a compensating increase in the level of quality and safety. The NRC staff (the staff) requires additional information (RAI) to complete its review and approval of the licensee's alternative request.

## RAI 1

Issue: The licensee did not specify the relevant materials of the SBLC nozzle and associated nozzle-to-vessel weld pictured in Figure I6R-01.1 of the submittal. This information is relevant to the request because it allows the staff to assess potential degradation mechanisms.

Request: Describe the materials of construction for the nozzle and weld at Dresden 2 and 3.

**RAI 2**

Issue: The licensee did not address the operating experience and examination history of the nozzle-to-vessel weld of the SBLC nozzles of the subject units. This information is relevant to the request because it allows the staff to understand the overall performance of the SBLC nozzles.

Request: Describe the operating history and examination history of the nozzle-to-vessel weld of the SBLC nozzles, including a description of the ultrasonic examination coverage obtained, at Dresden 2 and 3.

**RAI 3**

Issue: The licensee described partial examination history of the SBLC nozzle inner radius of the subject units, including the NRC-approved alternative for the fifth ISI interval. However, the licensee does not describe the examination history for the first through the fourth ISI intervals. This information is relevant to the request because it allows the staff to understand the full examination history of the SBLC nozzle inner radius.
Request: Describe the full examination history of the SBLC nozzle inner radius locations at Dresden 2 and 3.

**RAI 4**

Issue: The licensee stated that performing an ultrasonic examination of the SBLC nozzle inner radius location would constitute a hardship or unusual difficulty without a compensating increase in quality or safety. However, the 2017 Edition of ASME Code, Section XI (the applicable code edition for the sixth ISI interval of the subject units) allows a VT-1 visual examination in lieu of an ultrasonic examination, provided the nozzle meets certain geometric conditions and provided the licensee meets the conditions specified in 10 CFR 50.55a(b)(2)(xxi)(B). The licensee did not address the potential for performing the VT-1 examination. This information is relevant to the request because the licensee should analyze the entirety of the Section XI requirement as part of requesting an alternative.

Request: Describe the feasibility of performing the VT-1 examination for the SBLC nozzle inside radius specified in IWB-2500(g) in Section XI of the ASME Code, 2017 Edition, including all the relevant provisos in IWB-2500 and 10 CFR 50.55a(b)(2)(xxi)(B).

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