From: Robert Kuntz
Sent: Friday, December 16, 2022 11:43 AM
To: rebecca.steinman@constellation.com
Subject: DRAFT Request for Additional Information - Quad Cities Alternative RV-04, Inservice Testing of High Pressure Coolant Injection Drain Pot Solenoid Valves (EPD L-2022-LLR-0070

By a letter dated October 7, 2022, Constellation submitted to the U.S. Nuclear Regulatory Commission (NRC) alternative request RV-04 related to the inservice testing requirements for high pressure coolant injection drain poot solenoid valves at Quad Cities Nuclear Power Station, Units 1 and 2. The NRC staff has determined that additional information is required to complete its review of alternative request RV-04. The following is the NRC staff's draft request for additional information (RAI). If Constellation requires clarification on the following draft RAI contact me to schedule a meeting to discuss. If no clarification is required then this draft RAI becomes a formal RAI and the NRC staff will expect a response within 30 days of this message.

Robert Kuntz
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(301) 415-3733

DRAFT REQUEST FOR ADDITIONAL INFORMATION REGARDING

ALTERNATIVE REQUEST RV-04

PROPOSED ALTERNATIVE TO HIGH PRESSURE COOLANT INJECTION DRAIN POT

SOLENOID VALVE REQUIREMENTS

IN ACCORDANCE WITH 10 CFR 50.55a(z)(1)

SIXTH 10-YEAR INSERVICE TESTING PROGRAM INTERVAL

QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2

DOCKET NOS. 50-254 AND 50-265

EPID L-2022-LLR-0070

Background:

By a letter dated October 7, 2022 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22280A124), Constellation (the licensee) submitted to the U.S. Nuclear Regulatory Commission (NRC) Alternative Request RV-04 regarding certain inservice testing (IST) requirements of the 2017 Edition of the American Society of Mechanical Engineers (ASME) *Operation and Maintenance of Nuclear Power Plants,* Division 1, OM Code: Section IST (OM Code) for the IST Program at Quad Cities Nuclear Power Station, Units 1 and 2 (Quad Cities) associated with the Sixth 10-Year IST Program interval.

Regulatory Requirements:

The NRC regulations in Section 55a, "Codes and standards," in Part 50, "Domestic Licensing of Production and Utilization Facilities," in Title 10, "Energy," of the *Code of Federal Regulations* (10 CFR 50.55a) in paragraph (z), "Alternatives to codes and standards requirements," state the following:

> Alternatives to the requirements of paragraphs (b) through (h) of this section or portions thereof may be used when authorized by the Director, Office of Nuclear Reactor Regulation. A proposed alternative must be submitted and authorized prior to implementation. The applicant or licensee must demonstrate that:
>
> (1) *Acceptable level of quality and safety.* The proposed alternative would provide an acceptable level of quality and safety; or
>
> (2) *Hardship without a compensating increase in quality and safety.* Compliance with the specified requirements of this section would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

Issue

As an alternative to the ASME OM Code requirements for the high-pressure coolant injection (HPCI) drain pot solenoid valves at Quad Cities, the licensee proposes in Alternative Request RV-04 for the Sixth 10-Year IST Program interval that a "functional verification test will be conducted on the drain pot level limit switches and the associated control room annunciators at least once every 2 years." In Alternative Request RV-04 for the Sixth 10-Year IST Program interval at Quad Cities, the licensee states that Alternative Request RV-04 for the Fifth 10-Year IST Program interval is the precedent for this request for the Sixth 10-Year IST Program interval. However, the Exelon letter dated February 15, 2012 (ML12046A334) describing Alternative Request RV-04 for the Fifth 10-Year IST Program interval at Quad Cities stated that a "functional verification test is conducted on the drain pot level limit switches and the associated control room annunciators at least once every 92 days." The NRC staff relied on this functional verification test schedule in its safety evaluation dated February 14, 2013 (ML13042A348) in authorizing Alternative Request RV-04 for the Fifth 10-Year IST Program interval at Quad Cities.

Request

Describe the basis for the functional verification test schedule in Alternative Request RV-04 for the Sixth 10-Year IST Program interval in comparison to the referenced precedent in Alternative Request RV-04 for the Fifth 10-Year IST Program interval at Quad Cities.

Hearing Identifier: NRR_DRMA
Email Number: 1882

Mail Envelope Properties (SA9PR09MB4640039F2B4642C1F3CBB52999E69)

Subject: DRAFT Request for Additional Information - Quad Cities Alternative RV-04, Inservice Testing of High Pressure Coolant Injection Drain Pot Solenoid Valves (EPD L-2022-LLR-0070
Sent Date: 12/16/2022 11:42:48 AM
Received Date: 12/16/2022 11:42:00 AM
From: Robert Kuntz

Created By: Robert.Kuntz@nrc.gov

Recipients:
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Tracking Status: None

Post Office: SA9PR09MB4640.namprd09.prod.outlook.com

Files	**Size**	**Date & Time**
MESSAGE	4470	12/16/2022 11:42:00 AM

Options
Priority: Normal
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date: