

July 25, 2022

10 CFR 50.55a

RS-22-094

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Quad Cities Nuclear Power Station, Units 1 and 2
Renewed Facility Operating License Nos. DPR-29 and DPR-30
NRC Docket Nos. 50-254 and 50-265

Subject: Submittal of Sixth Inservice Inspection Interval Relief Request I6R-09 to Permit Continued Application of Certain ASME Section XI 2013 Edition Non-Destructive Examination Requirements

Reference: Letter from N.L. Salgado (U.S. NRC) to B.C. Hanson (Exelon Generation Company, LLC), "Byron Station, Unit Nos. 1 And 2; Dresden Nuclear Power Station, Units 2 and 3; James A. Fitzpatrick Nuclear Power Plant; Lasalle County Station, Units 1 and 2; Limerick Generating Station, Units 1 and 2; and Quad Cities Nuclear Power Station, Units 1 And 2 – Request to Use Provisions in the 2013 Edition of the ASME Boiler And Pressure Vessel Code For Performing Non-Destructive Examinations (EPID L-2019-LLR-0080)," dated April 17, 2020 (ADAMS Accession No. ML20099D955)

In accordance with 10 CFR 50.55a, "Codes and standards," paragraph (z)(1), Constellation Energy Generation (CEG), LLC requests NRC approval of relief request I6R-09 associated with the Sixth Inservice Inspection (ISI) Interval for Quad Cities Nuclear Power Station (QCNPS), Units 1 and 2.

The Sixth Interval of the QCNPS, Units 1 and 2, ISI Program will comply with the 2017 Edition of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (BPV) Code. However, this request proposes short-term application of certain 2013 Edition non-destructive examination requirements to maintain QCNPS requirements consistent with the remainder of the CEG fleet. Request I6R-09 is attached.

The Sixth ISI Interval at QCNPS will begin on April 2, 2023; accordingly, CEG requests approval of this request by March 31, 2023, to support the Sixth ISI Interval.

U.S. Nuclear Regulatory Commission
July 25, 2022
Page 2

There are no regulatory commitments contained within this letter. Should you have any questions concerning this letter, please contact Ms. Rebecca L. Steinman at 630-657-2831.

Respectfully,

A handwritten signature in black ink, appearing to read "Patrick R. Simpson". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Patrick R. Simpson
Sr. Manager – Licensing
Constellation Energy Generation, LLC

Attachment: 10 CFR 50.55a Relief Request I6R-09, Rev. 0

cc: NRC Regional Administrator, Region III
NRC Senior Resident Inspector – Quad Cities Nuclear Power Station

Alternative to Permit Continued Application of Certain ASME Section XI 2013 Edition NDE Requirements for Short Term Fleet Consistency in Accordance with 10 CFR 50.55a(z)(1) – "Alternative Provides Acceptable Level of Quality and Safety"

1. ASME Code Component(s) Affected

Code Class:	1, 2, 3, and MC
Reference:	ASME Section XI, 2013 Edition ASME Section XI, 2017 Edition
Examination Category:	All, as related to NDE Methods and Requirements
Item Number:	All, as related to NDE Methods and Requirements
Description:	Alternative to Permit Continued Application of Certain ASME Section XI 2013 Edition NDE Requirements for Short Term Fleet Consistency
Components:	Class 1, 2, 3, and MC Component Exams

2. Applicable Code Edition

The Sixth Interval of the Quad Cities Nuclear Power Station (QCNPS), Units 1 and 2, Inservice Inspection (ISI) Programs will be based on the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (BPV) Code, Section XI, 2017 Edition.

The Fifth Interval of the QCNPS, Units 1 and 2, ISI Programs are currently based on the ASME Section XI, 2013 Edition for all non-destructive examination (NDE) requirements. The approval for using the 2013 Edition NDE requirements was made under NRC Safety Evaluation dated April 17, 2020 (ML20099D955). Similarly, all Constellation Energy Generation (CEG), LLC plants are currently standardized on the 2013 Edition for NDE requirements, either via this same relief request or under the normal plant ISI Program ASME Section XI code of record.

3. Applicable Code Requirements

CEG is required to update the QCNPS, Units 1 and 2, ISI Program for the Sixth Interval to the latest Edition of the ASME BPV Code, Section XI, approved by the Nuclear Regulatory Commission (NRC) in 10 CFR 50.55a(a).

10 CFR 50.55a(g)(4)(ii), *Applicable ISI Code: Successive 120-month intervals*, states:

"Inservice examination of components and system pressure tests conducted during successive 120-month inspection intervals must comply with the requirements of the latest edition and addenda of the ASME Code incorporated by reference in paragraph (a) of this section 18 months before the start of the 120-month inspection interval..."

In accordance with 10 CFR 50.55a(a)(1)(ii)(C)(55), the 2017 Edition is the latest NRC approved version of ASME Section XI as of 18 months prior to the QCNPS Sixth Interval start date.

Alternative to Permit Continued Application of Certain ASME Section XI 2013 Edition NDE Requirements for Short Term Fleet Consistency in Accordance with 10 CFR 50.55a(z)(1) – "Alternative Provides Acceptable Level of Quality and Safety"

4. Reason for Request

The QCNPS, Units 1 and 2, Sixth ISI Interval is currently scheduled to begin on April 2, 2023. The current fleet approval for all CEG plants to be governed by the NDE requirements of the 2013 Edition of ASME Section XI will expire for QCNPS on this date. And based on 10 CFR 50.55a(g)(4)(ii) the Sixth Interval ISI Program for QCNPS will be required to update to the 2017 Edition.

The CEG fleet of plants currently uses a common Code Edition specifically for NDE requirements such that inservice inspection related NDE activities across the fleet are performed in accordance with a standardized fleet program. The standardized NDE requirements and procedures are currently based on the 2013 Edition of ASME Section XI. While the overall ISI Program requirements are managed in site-specific documents under plant-specific code editions, the NDE program is controlled in common corporate procedures that are implemented across the entire CEG nuclear fleet.

This standardized fleet program is currently based on either the NRC approval referenced in Section 2 or is in accordance with the individual plant ASME Section XI code of record for the station's ISI Program. Quad Cities was included in the April 17, 2020 approval to use ASME Section XI, 2013 Edition for the performance of NDE activities through the end of the current Fifth ISI interval in order to allow use of common CEG procedures, processes, training, knowledge, and technical skills.

Due to the difference in interval start dates for QCNPS as compared to the other CEG sites, the upcoming QCNPS Sixth Interval would require development and implementation of a separate and unique NDE Program with unique supporting procedures affecting multiple organizations. Additionally, CEG would be required to create a unique skill set with unique training applicable specifically QCNPS. This minimizes the potential for using shared resources with other CEG sites, presents human performance concerns when applying different criteria, and prevents the use of common site and fleet procedures.

Pursuant to 10 CFR 50.55a(a)(z)(1), CEG requests authorization to continue to utilize the NDE specific requirements in the 2013 Edition of ASME Section XI for QCNPS, Units 1 and 2 for a period of time consistent with the First Period of the new Sixth Interval. The conclusion of the First Period for QCNPS, Units 1 and 2 coincides with the time when the balance of the plants in the CEG fleet will update to the latest ASME Section XI NDE requirements approved in 10 CFR 50.55a. The continued use of ASME Section XI 2013 Edition at QCNPS will be limited to the performance of NDE activities during the First Period and is subject to the applicable conditions contained in 10 CFR 50.55a(b)(2).

5. Proposed Alternative and Basis for Use

CEG proposes to continue to utilize the 2013 Edition of ASME Section XI for NDE activities related to performing inservice inspections during the First Period of the QCNPS Sixth Interval. In implementing this proposed alternative, CEG will comply with

Alternative to Permit Continued Application of Certain ASME Section XI 2013 Edition NDE Requirements for Short Term Fleet Consistency in Accordance with 10 CFR 50.55a(z)(1) – "Alternative Provides Acceptable Level of Quality and Safety"

all applicable NRC conditions and limitations related to the NDE requirements of the ASME Section XI 2013 Edition specified in 10 CFR 50.55a(b)(2).

Specifically, CEG is requesting the continued use of the provisions in the 2013 Edition of ASME Section XI for NDE activities associated with inservice inspections. These NDE activities are primarily driven from ASME Section XI Subarticles IWA-2100, IWA-2200, and IWA 2300. CEG will comply with all related NDE requirements of the 2013 Edition of ASME Section XI, as they interface with the General Requirements of IWA-1000 as well as certain Mandatory and Nonmandatory Appendices.

This request will allow QCNPS NDE requirements to remain standardized with the rest of the CEG fleet until the balance of the plants update to the latest approved edition of ASME Section XI, nominally at the end of the QCNPS First Period of the Sixth Interval.

It is important to note that this request does **not** apply to the balance of the ISI Program including the selection, planning, and scheduling of ISI examinations and tests as defined in IWB-, IWC-, IWD-, IWE-, and IWF-2500 or NRC approved ISI alternatives. Therefore, ISI examinations and tests will be selected, planned, and scheduled in accordance with 2017 Edition of ASME Section XI which is the Sixth Interval Code of Record.

Continued application of the 2013 Edition of ASME Section XI specifically for NDE requirements (consistent with the other CEG sites) will provide an acceptable level of quality and safety, and will enhance the effective management and implementation of the NDE activities at QCNPS. Approval of this request supports CEG's ability to maximize efficiencies, minimize human performance and procedure error traps, and optimize the use of internal operating experience as all CEG units will continue to utilize common procedures, processes, training, and knowledge for NDE implementation.

6. Duration of Proposed Alternative

Relief is requested for the Sixth ISI Interval, First Inspection Period, for QCNPS, Units 1 and 2.

7. Precedents

- Exelon Generation Company Fleet Letter Request RS-19-089 (JAFP-19-0084) "Byron Station, Unit Nos. 1 and 2; Dresden Nuclear Power Station, Units 2 and 3; James A. Fitzpatrick Nuclear Power Plant; Lasalle County Station, Units 1 and 2; Limerick Generating Station, Units 1 and 2; and Quad Cities Nuclear Power Station, Units 1 and 2 - Request to Use Provisions in the 2013 Edition of the ASME Boiler and Pressure Vessel Code for Performing Non-Destructive Examinations (EPID L-2019-LLR-0080)" was approved by the NRC Safety Evaluation (SE) dated April 17, 2020 (NRC Accession No. ML20099D955).

Alternative to Permit Continued Application of Certain ASME Section XI 2013 Edition NDE Requirements for Short Term Fleet Consistency in Accordance with 10 CFR 50.55a(z)(1) – "Alternative Provides Acceptable Level of Quality and Safety"

- Arkansas Nuclear One, Unit 2 (AN0-2) Relief Request AN02-ISI-021, "Arkansas Nuclear One, Unit 2 - Request for Alternative AN02-ISI-021 to Permit Continued Application of the 2007 Edition through the 2008 Addenda of the ASME Code (EPID L-2018-LLR-0122)" was approved by the NRC SE dated June 11, 2019 (NRC Accession No. ML19156A400).

8. References

None