



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

December 18, 2020

LICENSEE: Exelon Generation Company, LLC

FACILITIES: Braidwood Station, Units 1 and 2; Byron Station, Unit Nos. 1 and 2; Calvert Cliffs Nuclear Power Plant, Units 1 and 2; Clinton Power Station, Unit No. 1; 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; Nine Mile Point Nuclear Station, Units 1 and 2; Peach Bottom Atomic Power Station, Units 2 and 3; Quad Cities Nuclear Power Station, Units 1 and 2; and R. E. Ginna Nuclear Power Plant

SUBJECT: SUMMARY OF DECEMBER 15, 2020, MEETING WITH EXELON GENERATION COMPANY, LLC REGARDING A PLANNED REQUEST FOR AN EXEMPTION TO REDUCE THE FREQUENCY OF UPDATES TO ITS INSERVICE TESTING AND INSPECTION PROGRAMS (EPID L-2020-LRM-0089)

On December 15, 2020, a Category 1 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC or Commission) staff and representatives of Exelon Generation Company, LLC (Exelon, the licensee). The purpose of the meeting was to discuss a proposed exemption to certain requirements in Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.55a, "Codes and standards," for the subject facilities. The meeting notice and agenda are available in the Agencywide Documents Access and Management System (ADAMS) at Accession No. ML20349A251. A list of attendees is enclosed. No decisions were made at this meeting. A pre-application meeting with Exelon on a similar proposal was held on November 4, 2020 (summary is available under ADAMS Accession No. ML20323A033).

Background

The regulations in 10 CFR 50.55a include, in part, requirements for the use of Section XI of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (BPV Code) and the ASME Code for Operation and Maintenance of Nuclear Power Plants (OM Code) for the inservice inspection (ISI) and inservice testing (IST) of nuclear power plants. Specific editions and addenda of these ASME Codes have been incorporated by reference into 10 CFR 50.55a, subject to certain limitations. Every 10 years, licensees are required to update their ISI and IST programs to the latest editions and addenda of the applicable ASME Code incorporated by reference in 10 CFR 50.55a.

In June 2020, the NRC Embark Venture Studios (Embark) recommended (ADAMS Accession No. ML20153A752) rulemaking to relax the requirement to update the ISI and IST programs every 10 years following the update to the 2019 or later edition of the ASME BPV Code and the 2020 or later edition of the ASME OM Code.

Discussion

For the subject facilities, Exelon plans to request an exemption that would allow it to reduce the frequency of updates to the containment, ISI, and IST programs from every 10 years to every 24 years. The proposed exemption would also allow Exelon to increase the ISI and IST intervals from 10 years to 12 years. Under this proposal, each facility would remain on the current code of record for two consecutive 12-year intervals. The ISI intervals would then consist of three 4-year periods, which would allow for “skip outages” where most inspections would not be performed. Exelon plans to submit a single exemption request under 10 CFR 50.12, “Specific exemptions,” for its entire operating fleet in January 2021.

As discussed during the November 4, 2020, meeting, Exelon previously planned to submit a proposed alternative under 10 CFR 50.55a to accomplish these same objectives. The summary of the November 4, 2020, meeting states, in part:

The NRC staff stated that it would review and respond, as appropriate, to any licensing action that Exelon submitted. However, the staff believes the changes that Exelon is seeking should be implemented through a revision of 10 CFR 50.55a. The reasons provided in the presentation do not appear to be unique to Exelon. Therefore, it would be beneficial to consider the views of the broader industry and other stakeholders regarding Exelon’s proposed changes. Additionally, the staff stated that Exelon should consider working through the ASME consensus committees to revise the ISI and IST intervals.

Exelon stated that there are some similarities between its proposed exemption and previously granted exemptions from the requirements in Appendix J, “Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors,” to 10 CFR Part 50. However, Exelon did not elaborate on this statement.

Exelon stated that the application for exemption would identify the specific regulations in 10 CFR 50.55a for which they would be requesting an exemption. Exelon did not specifically identify these regulations during the meeting, but Exelon did state that it was not planning to request a complete exemption from 10 CFR 50.55a.

The regulation in 10 CFR 50.12 states that the NRC will not consider granting an exemption unless special circumstances are present. Exelon stated that the following special circumstances were present:

- Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule (10 CFR 50.12(a)(2)(ii)).
- Compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted (10 CFR 50.12(a)(2)(iii)).

For the first of these special circumstances, Exelon stated that the initial rule intended the updates to be minimal impact. Exelon stated that since the incorporation of the initial update requirements in 1976, costs to implement the ASME Code updates have escalated with no substantial benefit. In addition, Exelon stated that implementing updated code editions are not necessary to ensure adequate protection of public health and safety.

For the second of these special circumstances, Exelon stated that it will provide the costs and related analysis as part of its submittal. Exelon stated that the update process takes about 4 years to complete and costs about \$1 million for each site. Exelon stated that it does not see a significant difference in costs between its sites, so it plans to provide a single cost value, rather than a plant-specific breakdown of costs. Exelon stated that most of this cost is for administrative changes, such as changes to documentation and procedures. In addition, the 10-year interval is a challenge for certain types of tests because of Exelon's divisional outage strategy that includes "skip outages."

The NRC staff noted that, over the last few years, there have been major changes to the ASME OM Code requirements to improve the safety of nuclear power plants. For example, the ASME OM Code has been updated to address adverse operating experience of power-operated valves to provide reasonable assurance of their operational readiness to perform the applicable safety functions. Specifically, the staff discussed the improvements to the IST requirements for motor- and air-operated valves in 2009 and 2017, respectively. Exelon stated that it would consider including a discussion of how it will manage such items that will be implemented outside the ASME OM Code requirements as part of its exemption request. Exelon stated that it does not wait for ASME to update the Codes before it makes improvements to its IST and ISI programs.

The NRC staff noted that the licensee's ISI and IST programs are established based on the regulatory requirements to implement the ASME Codes, as incorporated by reference in 10 CFR 50.55a. The staff requested that the Exelon submittal address the foundation of the ISI and IST activities at the Exelon plants for NRC review and evaluation in lieu of the specific regulatory requirements in the more recent editions of the ASME Codes incorporated by reference in 10 CFR 50.55a.

Exelon stated that it had considered requesting either an exemption under 10 CFR 50.12 or an alternative under 10 CFR 50.55a(z) to implement its proposal. Exelon asked the NRC staff which approach it would prefer. The NRC staff noted that, consistent with the Embark recommendation and the November 4, 2020, meeting on this subject, rulemaking would be the preferred approach. Exelon stated that it did not expect this rulemaking to be completed until 2023, which would not fit its schedule. In addition, Exelon was concerned that implementing the 2019 edition of the ASME BPV Code would not be cost effective.

No public comments were made during the meeting. Public meeting feedback forms were not received. Please direct any inquiries to me at 301-415-1380 or Blake.Purnell@nrc.gov.

/RA/

Blake Purnell, Project Manager
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. STN 50-456, STN 50-457,
STN 50-454, STN 50-455, 50-317,
50-318, 50-461, 50-237, 50-249, 50-333,
50-373, 50-374, 50-352, 50-353, 50-220,
50-410, 50-277, 50-278, 50-254, 50-265,
and 50-244

Enclosure:
List of Attendees

cc: Listserv

LIST OF ATTENDEES

DECEMBER 15, 2020, MEETING WITH EXELON GENERATION COMPANY, LLC

Name	Affiliation
Blake Purnell	NRC
Steve Bloom	NRC
Angela Buford	NRC
David Rudland	NRC
Tom Scarbrough	NRC
Nancy Salgado	NRC
Robert Krsek	NRC
Tison Campbell	NRC
Sheldon Clark	NRC
Brian Harris	NRC
Hipo Gonzalez	NRC
Thomas Loomis	Exelon
Brendan Casey	Exelon
Mark DiRado	Exelon
Mark Weis	Exelon
Glenn Weiss	Exelon

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RidsNrrPMDresden Resource	BLee, NRR
RidsNrrPMFitzPatrick Resource	MBenson, NRR
RidsNrrPMLaSalle Resource	YDiaz-Castillo, NRR
RidsNrrPMLimerick Resource	SClark, OGC
RidsNrrPMNineMilePoint Resource	BHarris, OGC
RidsNrrPMPeachBottom Resource	TCampbell, OGC
RidsNrrPMQuadCities Resource	MWoods, OGC
RidsNrrPMREGinna Resource	JScro, OGC
RidsNrrDex Resource	RKrsek, OCM
RidsNrrDexEmib Resource	MDomke, RIII

ADAMS Accession Nos.:

ML20351A283 (Meeting Summary)

OFFICE	NRR/DORL/LPL3/PM	NRR/DORL/LPL3/LA	NRR/DORL/LPL3/BC	NRR/DORL/LPL3/PM
NAME	BPurnell	SRohrer (JBurkhardt for)	NSalgado (RKuntz for)	BPurnell
DATE	12/16/2020	12/17/2020	12/18/2020	12/18/2020

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