



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

April 8, 2021

Mr. David P. Rhoades
Senior Vice President
Exelon Generation Company, LLC
President and Chief Nuclear Officer (CNO)
Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: 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 – WITHDRAWAL OF REQUESTED EXEMPTION FROM CERTAIN REQUIREMENTS IN 10 CFR 50.55a (EPIDS L-2021-LLE-0014, -0015, AND -0016)

Dear Mr. Rhoades:

By letter dated March 3, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21063A179), Exelon Generation Company, LLC (Exelon) requested an exemption from certain requirements of Section 50.55a, "Codes and standards," of Title 10 of the *Code of Federal Regulations* (10 CFR) for 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 (collectively, the facilities).

The U.S. Nuclear Regulatory Commission (NRC, the Commission) 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 and the ASME, *Operation and Maintenance of Nuclear Power Plants*, Division 1, Section IST (collectively, the ASME Codes) for the inservice inspection (ISI) and inservice testing (IST) of nuclear power plant components. Specific editions and addenda of the 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 comply with the latest editions and addenda of the applicable ASME Codes incorporated by reference in 10 CFR 50.55a. This update coincides with the 10-year ISI and IST intervals established by the ASME Codes.

Exelon's letter states, in part:

In accordance with 10 CFR 50.12, "Specific exemptions," paragraphs (a)(1) and (a)(2)(iii) Exelon Generating Company, LLC (Exelon), is requesting NRC approval of a one-time exemption to extend the 10-year ASME Code updates for the Inservice Inspection, Containment Inservice Inspection, and Inservice Testing programs to 24 years.

In the attachment to the letter, Exelon specifically requests a one-time exemption from most of the requirements in paragraphs (b)(5)(ii), (b)(5)(iii), (b)(6)(ii), (b)(6)(iii), (f)(4)(ii), (f)(5)(iv), (g)(4)(ii), (g)(5)(iii), and (g)(5)(iv) of 10 CFR 50.55a. Exelon also states that the proposed exemption would "modify compliance" with certain sections of the ASME Codes. Exelon requests that the proposed exemption apply until termination of the licenses for each facility.

On November 4 and December 15, 2020, the NRC staff held pre-application meetings with Exelon personnel regarding this proposed licensing action (ADAMS Accession Nos. ML20323A033 and ML20351A283, respectively).

The purpose of this letter is to provide the results of the NRC staff's acceptance review of this exemption request. The acceptance review was performed to determine if there was sufficient technical information in scope and depth to allow the NRC staff to complete its detailed technical review. The acceptance review is also intended to identify whether the application has any readily apparent information insufficiencies in its characterization of the regulatory requirements or the licensing bases of the plants.

In accordance with 10 CFR 50.12(a)(1), the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of the regulations of 10 CFR Part 50, which are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security. In addition, under 10 CFR 50.12(a)(2), the Commission will not consider granting an exemption unless special circumstances are present. In accordance with 10 CFR 50.12(a)(2)(iii), special circumstances are present whenever compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated.

By letter dated April 8, 2021 (ADAMS Accession No. ML21098A066), Exelon requested to withdraw the application from NRC review. The NRC acknowledges Exelon's request to withdraw the application. The NRC staff activities on the review have ceased and the associated EPIDs L-2021-LLE-0014, -0015, and -0016 have been closed.

The NRC staff notes that its review to date has identified that Exelon's application did not provide the technical information discussed in the enclosure to this letter in sufficient detail to enable the staff to complete its detailed review. The NRC staff informed Exelon personnel of the information insufficiencies during a conference call on April 6, 2021. If Exelon decides to resubmit the request for the proposed exemption, the application must provide the information specified in the enclosure to this letter for the NRC staff to accept the application for review. The NRC staff would support holding a pre-application meeting prior to resubmittal.

If you have any questions, please contact me by email at Blake.Purnell@nrc.gov.

Sincerely,

/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

cc: Listserv

Enclosure:
Information Needed for Technical Review

INFORMATION NEEDED FOR TECHNICAL REVIEW

PROPOSED EXEMPTION FROM CERTAIN REQUIREMENTS IN 10 CFR 50.55a

EXELON GENERATION COMPANY, LLC

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

By letter dated March 3, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21063A179), Exelon Generation Company, LLC (Exelon) requested an exemption from certain requirements of Section 50.55a, "Codes and standards," of Title 10 of the *Code of Federal Regulations* (10 CFR) for 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 (collectively, the facilities).

The U.S. Nuclear Regulatory Commission (NRC, the Commission) 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 and the ASME, *Operation and Maintenance of Nuclear Power Plants*, Division 1, Section IST (ASME OM Code) (collectively, the ASME Codes) for the inservice inspection (ISI) and inservice testing (IST) of nuclear power plant components. Specific editions and addenda of the 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 comply with the latest editions and addenda of the applicable ASME Codes incorporated by reference in 10 CFR 50.55a. This update coincides with the 10-year ISI and IST intervals established by the ASME Codes.

Exelon's letter states, in part:

In accordance with 10 CFR 50.12, "Specific exemptions," paragraphs (a)(1) and (a)(2)(iii) Exelon Generating Company, LLC (Exelon), is requesting NRC approval of a one-time exemption to extend the 10-year ASME Code updates for the Inservice Inspection, Containment Inservice Inspection [CISI], and Inservice Testing programs to 24 years.

By letter dated April 8, 2021 (ADAMS Accession No. ML21098A066), Exelon requested to withdraw the application from NRC review. Prior to this withdrawal request, the NRC staff identified that the information listed below is needed for the staff to begin its technical review of the application. Additionally, other aspects of the application for a proposed exemption may also be insufficient but were not reviewed or identified due to the withdrawal of the application. If Exelon decides to resubmit the request for the proposed exemption, the application must provide the information listed below for the NRC staff to accept the application for review.

Enclosure

Regulatory Requirements

In accordance with 10 CFR 50.12(a)(1), the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of the regulations of 10 CFR Part 50, which are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security. In addition, under 10 CFR 50.12(a)(2), the Commission will not consider granting an exemption unless special circumstances are present. In accordance with 10 CFR 50.12(a)(2)(iii), special circumstances are present whenever compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated.

Discussion

The cover letter of Exelon's application states that Exelon is requesting a one-time exemption to extend the 10-year ASME Code updates for the ISI, CISI, and IST programs to 24 years. In the attachment to the cover letter, Exelon requests a one-time exemption from most of the requirements in paragraphs (b)(5)(ii), (b)(5)(iii), (b)(6)(ii), (b)(6)(iii), (f)(4)(ii), (f)(5)(iv), (g)(4)(ii), (g)(5)(iii), and (g)(5)(iv) of 10 CFR 50.55a. The NRC staff notes that these paragraphs provide requirements beyond just specifying the update interval; however, the application provides no information to address these additional requirements.

In its application, Exelon states that this exemption would also modify compliance with certain sections of the ASME Codes. However, it is not clear what this statement means. The application states, in part, that: "If the exemption is granted, each station would maintain the current code of record for the ISI, CISI, and IST Program from the from the start date of the current interval up to 24 years with the option to update to a newer NRC approved version in accordance with paragraphs (f)(4)(iv) and (g)(4)(iv)." However, the application does not describe the current code of record for each facility. In addition, the application does not fully describe the changes to the licensing basis for each facility.

The application requests that the exemption apply until termination of the license for each facility. Exelon has several facilities that are scheduled to permanently cease operation, due to early closure or expiration of their operating licenses, prior to the start of the next ISI and IST intervals. Once a facility permanently ceases operation, the scope of the ISI and IST programs are substantially reduced. However, the application does not address the change in scope of the ISI and IST programs and does not explain why special circumstances are present for a facility that has permanently ceased operation.

Exelon also stated that "the stations will establish two 12-year inspection intervals with 3 inspection periods each. For the current interval, the interval would be extended by two years. The subsequent interval would be composed of three periods, nominally 4-years each to allow a minimum two outages per period." However, the application does not clearly request an exemption or identify any form of relief request from any of the ASME Code requirements, as incorporated by reference in 10 CFR 50.55a. Furthermore, the application does not provide information to support an exemption from these requirements.

Exelon states that, per 10 CFR 50.12(a)(2)(iii), special circumstances are present because compliance with the update requirements in 10 CFR 50.55a would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was

adopted, or that are significantly in excess of those incurred by others similarly situated. The application states, in part:

Since the incorporation of the initial update requirements in 1976, costs to implement the ASME Code updates have escalated with no substantial benefit. Application of a new program is not considered “orderly” and does result in significant administrative impact to the program and associated program personnel which was not the intent of the original rule.

The application does not provide sufficient information to support these claims. For example, the application states, in part, that “the cost of an update for a dual unit or single unit site has grown to as much as \$750,000 for an ISI program update and \$1,000,000 for an IST program update.” However, the application does not provide any plant-specific information regarding these costs, how such costs were determined, or any information that would demonstrate that such costs are “significantly in excess” of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated. The application also does not identify any special circumstances associated with the potential exemption from requirements in addition to the ASME Code update requirements in 10 CFR 50.55a.

Information Needed

1. Clearly define the scope of the exemption request. If Exelon’s intent is to request an exemption from both the update and interval requirements for the ISI, CISI, and IST programs, then both requests need to be clearly described and justified in the application. If Exelon’s intention is to submit other related requests (e.g., alternative requests), these requests need to be identified in the application and submitted in parallel with the exemption request.
2. Clearly and completely identify the specific regulatory requirements from which Exelon is requesting an exemption. For example, if Exelon is requesting an exemption from one aspect of a cited regulation (e.g., only the update interval), then this needs to be explicitly stated. If Exelon is requesting an exemption from a provision in the ASME Code (e.g., the ISI interval), then the application needs to fully specify the requirement and trace this requirement to the regulations in 10 CFR 50.55a.

Specify all the regulatory requirements, including ASME Code provisions and 10 CFR 50.55a conditions, that will not be implemented or that will be deferred as a result of the change in the update interval from 10 years to 24 years. For each unit, this would include identifying the specific editions and addenda of the applicable ASME Codes incorporated by reference in 10 CFR 50.55a, along with any conditions on these Codes, for all future 10-year intervals for the duration of the exemption.

3. The application requests a “one-time” exemption, which implies that the exemption would only apply to the next required ASME Code update. However, the application also requests that the proposed exemption apply until termination of the license for each facility, which implies that the exemption would be permanent. For each facility, clearly define and justify the duration of the requested exemption. If the duration is temporary, provide the end date of the exemption for each unit.
4. For each facility, specify the current codes of record for the ISI, CISI, and IST programs, including the start and end dates, and provide a complete listing of the ASME Code

Cases that have been implemented. In addition, specify the regulatory requirements for the motor-operated valve program and air-operated valve program for each facility.

5. Describe the basis for stating that the current codes of record for each Exelon facility are “mature” codes, given that some Exelon facilities have not adopted certain improvements to the ASME Codes, as incorporated by reference in 10 CFR 50.55a, that were based on lessons-learned from nuclear power plant operating experience. For example, the editions and addenda of the ASME OM Code that are currently applicable to some Exelon facilities do not include Mandatory Appendix III, “Preservice and Inservice Testing of Active Electric Motor-Operated Valve Assemblies in Water-Cooled Reactor Nuclear Power Plants,” and Mandatory Appendix IV, “Preservice and Inservice Testing of Active Pneumatically Operated Valve Assemblies in Nuclear Reactor Power Plants.”
6. Describe how the proposed exemption would affect the licensing basis for each facility. For each facility, provide a detailed description of the current ISI, CISI, and IST programs that clearly identifies the elements of each program that are required by 10 CFR 50.55a and the elements of each program that are being implemented in response to generic issues (such as generic letters) or are considered to be voluntary. Describe how each required element of these programs would be revised by future ASME Code updates currently required by 10 CFR 50.55a. Fully describe how the proposed exemption would change each required or voluntary element of these programs, currently and in the future, and demonstrate that each change would not present an undue risk to public health and safety.
7. For each facility, provide a complete listing, brief description, and expiration dates of all currently applicable NRC-approved relief requests, alternative requests, and requests to use a later edition of the ASME Code. Describe how each of these approved requests would be affected by the proposed exemption.
8. On a plant-specific basis, explain why the special circumstances in 10 CFR 50.12(a)(2)(iii) are present for each regulation subject to this exemption request.
 - a. On a plant-specific basis, demonstrate that compliance with the subject regulations would result in undue hardship or other costs (in today’s dollars) that are significantly in excess of those contemplated when the subject regulations were adopted, or that are significantly in excess of those incurred by others similarly situated.
 - b. Describe the reduction in hardship or other costs (in today’s dollars) that would result if the proposed exemption is granted, and compare this reduction to the hardship and other costs associated with compliance with the subject regulations.
 - c. Explain how these hardships and other costs were determined and describe any uncertainties associated with these determinations. Describe the hardship and other costs associated with the administrative changes to the programs (e.g., updates to procedures) and changes to inspection and testing requirements (e.g., reductions in costs associated with reduced testing frequencies). Clearly identify whether the hardships and other costs are associated with the required or voluntary elements of the ISI, CISI, and IST programs.

9. For each facility, specify the ASME Code of record for the current 10-year snubber programs, as required by 10 CFR 50.55a and 10 CFR 50.55a(b)(3)(v), and any associated ASME Code Cases that have been implemented. Specify if these snubber programs are developed as part of the ISI or IST programs, including the start and end dates for the program intervals.

10. For each facility, identify the changes to the ISI and IST programs that have or will occur as a result of the adoption or planned adoption of 10 CFR 50.69, "Risk-informed categorization and treatment of structures, systems and components for nuclear power reactors." Describe how any undue hardship and other costs associated with compliance with the regulations from which Exelon is requesting an exemption are affected by the adoption of 10 CFR 50.69.

SUBJECT: 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 – WITHDRAWAL OF REQUESTED EXEMPTION FROM CERTAIN REQUIREMENTS IN 10 CFR 50.55a (EPIDS L-2021-LLE-0014, -0015, AND -0016) DATED APRIL 08, 2021

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ADAMS Accession No.: ML21077A177

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