

NRR-PMDAPEm Resource

From: Purnell, Blake
Sent: Friday, May 20, 2016 8:59 AM
To: Loomis, Thomas R:(GenCo-Nuc) (thomas.loomis@exeloncorp.com)
Cc: Gudger, David T:(GenCo-Nuc)
Subject: Exelon Generation Company, LLC - Fleet Relief Request to use Code Case N-513-4 (CAC Nos. MF7301 - MF7322)
Attachments: Exelon Code Case N-513-4 RAI.pdf

Mr. Loomis:

By application dated January 28, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16029A003), Exelon Generation Company, LLC (the licensee) submitted a request in accordance with Paragraph 50.55a(z)(2) of Title 10 of the Code of Federal Regulations (10 CFR) for a proposed alternative to the requirements of Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) 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; LaSalle County Station, Units 1 and 2; Limerick Generation Station, Units 1 and 2; Nine Mile Point Nuclear Station, Units 1 and 2; Oyster Creek Nuclear Generating Station; Peach Bottom Atomic Power Station, Units 2 and 3; Quad Cities Nuclear Power Station, Units 1 and 2; R. E. Ginna Nuclear Power Plant; and Three Mile Island Nuclear Station, Unit 1. The proposed alternative would allow the licensee to use ASME Code Case N 513-4, "Evaluation Criteria for Temporary Acceptance of Flaws in Moderate Energy Class 2 or 3 Piping section XI, Division 1," for the evaluation and temporary acceptance of flaws in moderate energy Class 2 and 3 piping in lieu of specified ASME Code requirements.

The U.S. Nuclear Regulatory Commission (NRC) staff has reviewed the application and determined that additional information is needed for the staff to complete its review. Provide a response to the attached request for additional information within 30 days. If you have any questions, please contact me at 301-415-1380.

Sincerely,

Blake Purnell, Project Manager
Plant Licensing Branch III-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission

DOCKET NOS. STN 50-456, STN 50-457, STN 50-454, STN 50-455,
50-317, 50-318, 50-461, 50-237, 50-249, 50-373,
50-374, 50-352, 50-353, 50-220, 50-410, 50-219,
50-277, 50-278, 50-254, 50-265, 50-244, AND 50-289

Hearing Identifier: NRR_PMDA
Email Number: 2856

Mail Envelope Properties (Blake.Purnell@nrc.gov20160520085800)

Subject: Exelon Generation Company, LLC - Fleet Relief Request to use Code Case N-513-4 (CAC Nos. MF7301 - MF7322)
Sent Date: 5/20/2016 8:58:45 AM
Received Date: 5/20/2016 8:58:00 AM
From: Purnell, Blake

Created By: Blake.Purnell@nrc.gov

Recipients:

"Gudger, David T:(GenCo-Nuc)" <David.Gudger@exeloncorp.com>

Tracking Status: None

"Loomis, Thomas R:(GenCo-Nuc) (thomas.loomis@exeloncorp.com)" <thomas.loomis@exeloncorp.com>

Tracking Status: None

Post Office:

Files	Size	Date & Time
MESSAGE	2165	5/20/2016 8:58:00 AM
Exelon Code Case N-513-4 RAI.pdf		78190

Options

Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

REQUEST FOR ADDITIONAL INFORMATION

PROPOSED ALTERNATIVE TO USE ASME CODE CASE N-789

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;

LASALLE COUNTY STATION, UNITS 1 AND 2;

LIMERICK GENERATING STATION, UNITS 1 AND 2;

NINE MILE POINT NUCLEAR STATION, UNITS 1 AND 2;

OYSTER CREEK NUCLEAR GENERATING STATION;

PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3;

QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2;

R.E. GINNA NUCLEAR POWER PLANT; AND

THREE MILE ISLAND NUCLEAR STATION, UNIT 1.

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, 50-373, 50-374, 50-352, 50-353, 50-220, 50-410, 50-219,

50-277, 50-278, 50-254, 50-265, 50-244, AND 50-289

By application dated January 28, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16029A003), Exelon Generation Company, LLC (the licensee) submitted a request in accordance with Paragraph 50.55a(z)(2) of Title 10 of the Code of Federal Regulations (10 CFR) for a proposed alternative to the requirements of Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) 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; LaSalle County Station, Units 1 and 2; Limerick Generation Station, Units 1 and 2; Nine Mile Point Nuclear Station, Units 1 and 2; Oyster Creek Nuclear Generating Station; Peach Bottom Atomic Power Station, Units 2 and 3; Quad Cities Nuclear Power Station, Units 1 and 2; R. E. Ginna Nuclear Power Plant; and Three Mile Island Nuclear Station, Unit 1. The proposed alternative would allow the licensee to use ASME Code Case N-513-4, "Evaluation Criteria for

Temporary Acceptance of Flaws in Moderate Energy Class 2 or 3 Piping section XI, Division 1,” for the evaluation and temporary acceptance of flaws in moderate energy Class 2 and 3 piping in lieu of specified ASME Code requirements.

The U.S. Nuclear Regulatory Commission (NRC) staff has reviewed the application and determined that the following information is needed for the staff to complete its review.

RAI-1

Code Case N-513-4 provides criteria which would allow the licensee to accept flaws, including through-wall flaws, in moderate energy Class 2 or 3 piping including elbows, bent pipe, reducers, expanders, and branch tees, without performing a repair or replacement activity for a limited time, not to exceed the next schedule refueling outage. Paragraph 1(f) states:

The provisions of this Case demonstrate the integrity of the item and not the consequences of leakage. It is the responsibility of the Owner to consider effects of leakage in demonstrating system operability and performing plant flooding analyses.

The proposed alternative does not specify a maximum leakage rate for which the alternative may be used. Through operating experience and information provided in other relief requests, the NRC staff has identified cases where leak rates increased from drops per minute to gallons per minute (gpm) before the next refueling schedule. Based on this, the staff requires additional information regarding the management of leakage and the possibility of large leak rates which can erode defense-in-depth and lead to adverse consequences. The NRC has approved similar alternatives which were limited to a maximum leakage rate of 5 gpm (e.g., see ADAMS Accession No. ML15070A428).

Revise the proposed alternative to include a maximum leakage rate for which Code Case N-513-4 will be used. Explain how the proposed maximum leakage rate is adequate to ensure defense-in-depth is maintained and that adverse consequences are minimized.