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

June 29, 2020

LICENSEE: EXELON GENERATION COMPANY, LLC

FACILITIES: BRAIDWOOD STATION, UNITS 1 AND 2; CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2; CLINTON POWER STATION, UNIT NO. 1; 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; AND R. E. GINNNA NUCLEAR POWER PLANT

SUBJECT: SUMMARY OF JUNE 24, 2020, MEETING WITH EXELON GENERATION COMPANY, LLC REGARDING A PLANNED REQUEST FOR AN ALTERNATIVE TO SUPPLEMENTAL VALVE POSITION INDICATION TESTING REQUIREMENTS (EPID L-2020-LRM-0055)

On June 24, 2020, a Category 1 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) staff and representatives of Exelon Generation Company, LLC (Exelon, the licensee). The purpose of the meeting was to discuss a proposed alternative to the requirements in Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.55a, "Codes and standards," for supplemental valve position indication (SPI) testing. The meeting notice and agenda are available in the Agencywide Documents Access and Management System (ADAMS) at Accession No. ML20161A325. A copy of Exelon's presentation is available in ADAMS at Accession No. ML20171A235. A list of attendees is enclosed.

The proposed alternative will be for the Exelon plants which are currently using, or will be soon using, the 2012 Edition of the American Society of Mechanical Engineers (ASME) Operation and Maintenance of Nuclear Power Plants, Division 1 (OM Code). The ASME OM Code requires SPI testing to be performed once every 2 years. In addition, 10 CFR 50.55a(b)(3)(xi) requires:

> When implementing ASME OM Code, 2012 Edition, Subsection ISTC-3700, "Position Verification Testing," licensees shall verify that valve operation is accurately indicated by supplementing valve position indicating lights with other indications, such as flow meters or other suitable instrumentation, to provide assurance of proper obturator position.

The proposed alternative would allow Exelon to perform the SPI testing for certain valves at a frequency that is consistent with the test frequencies in Appendix J, "Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors," Option B, to 10 CFR Part 50. The specific valves are containment isolation valves, pressure isolation valves, and boundary valves that are currently tested in accordance with the Appendix J requirements or an NRC-approved alternative that is consistent with the Appendix J requirements. The proposed alternative would apply to different types of valves (e.g., motor-operated valves, air-operated valves, check valves). The proposed alternative would not apply to active motor-operated valves tested in accordance with the Mandatory Appendix III, "Preservice and Inservice Testing

of Active Electric Motor Operated Valve Assemblies in Light-Water Reactor Power Plants," of the ASME OM Code.

On February 28, 2020 (ADAMS Accession No. ML20059P100), Exelon submitted a similar request for an alternative to the SPI testing requirements. However, Exelon withdrew this request on April 10, 2020 (ADAMS Accession No. ML20101P584). The February 28, 2020, proposed alternative would have allowed Exelon to decrease the frequency of SPI testing for numerous valves at its facilities using a risk-informed approach. In an April 14, 2020, letter (ADAM Accession No. ML20092M768), the NRC staff identified the additional information that the staff would need to review the proposed alternative as a risk-informed submittal. During the June 24, 2020, meeting, Exelon personnel stated that the new proposed alternative would not be risk-informed and would not include risk information. The new proposed alternative would follow the performance-based approach in 10 CFR Part 50, Appendix J, Option B. The NRC staff noted that based on the Exelon presentation slides, the scope of the new request appeared to be smaller and that the additional information identified in the April 14, 2020, letter may not be needed to support the new request.

The NRC staff identified three possible options for Exelon to pursue the change: (1) a performance-based submittal where the performance history of each valve is discussed in the application; (2) a code case that is developed through the consensus process with the relevant ASME OM Code committee, and (3) a risk-informed approach that included the necessary risk information in the application.

Exelon cited a September 20, 2019, application for Palo Verde Nuclear Generating Station (ADAMS Accession No. ML19263F875) as a precedent for its proposed alternative. The NRC staff noted that the Palo Verde application provided specific information about each valve included in its request. The staff stated that Exelon's application should provide the valve identification, system, and historical performance. The staff stated that it normally verifies that there are not historic issues (e.g., stem-disc connection issues) with specific valves when it reviews requests for alternatives. Specifically, the staff stated that it uses the Institute for Nuclear Power Operations (INPO) database to verify specific valve information. Exelon stated that it could easily provide the specific information for each valve in the application and could do similar searches of the INPO database.

Exelon confirmed that the application would identify all the NRC-approved alternatives related to this request. The NRC staff stated that Exelon would not need to resubmit specific valve information that was provided in previous alternative requests. However, Exelon stated that the previously approved alternatives only account for a small subset of valves.

The NRC staff noted that the Appendix J requirements are only for leakage testing, but the proposed alternative will need to describe how both the open and closed position of the valves is verified. In addition, the NRC stated that the proposed alternative would need to describe how valve failures are treated given that the SPI testing and boundary valves are not part of Appendix J. Exelon stated that it is not intending to create any new requirements. Exelon stated that, under the proposed alternative, a valve failure would result in the valve returning to the current 2-year test interval. Successful testing of the valve for, typically, two consecutive 2-year intervals would be required before the test interval could be extended, consistent with Appendix J. Exelon further stated that it would not distinguish between valve failure and a position indication failure.

Exelon is planning on submitting the proposed alternative as a fleet request in July 2020 and will request approval within 6 months to support spring 2021 refueling outages. The NRC staff stated that it could work towards meeting the 6-month request date but the staff cannot guarantee that it will meet this date.

A representative for the Nuclear Energy Institute (NEI) asked about the NRC staff interactions with the ASME OM Code committee regarding the SPI test interval. The NEI representative also asked if the NRC staff has looked into other options (e.g., rulemaking) in case the effort with the ASME OM Code committee stalls. The NRC staff stated that there is an ongoing effort with the ASME OM Code committee to revise the SPI test interval requirements in the ASME OM Code. Additionally, the staff noted that although there were no other options currently being considered, it may be possible to include changes to the SPI testing requirements in a future rulemaking.

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,
50-317, 50-318, 50-461,
50-352, 50-353, 50-220,
50-410, 50-277, 50-278, and
50-244

Enclosure:
List of Attendees

cc: Listserv

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ADAMS Accession No. ML20181A000 *via email

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	06/29/2020	06/29/2020	06/29/2020	06/29/2020

OFFICIAL RECORD COPY

LIST OF ATTENDEES

JUNE 24, 2020, MEETING WITH EXELON GENERATION COMPANY, LLC

Name	**Affiliation**
Blake Purnell	NRC
Michael Farnan	NRC
Angela Buford	NRC
Nancy Salgado	NRC
Tom Scarbrough	NRC
Jeff Circle	NRC
Bob Pascarelli	NRC
Stephen Dinsmore	NRC
Hang Vu	NRC
Nick Hansing	NRC
V. Sreenivas	NRC
Mark DiRado	Exelon
William Reynolds	Exelon
Glenn Weiss	Exelon
David Neff	Exelon
David Gullott	Exelon
Lisa Zurawski	Exelon
Putri Kusumawatimurray	Exelon
Thomas Basso	Nuclear Energy Institute

Enclosure