



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

February 21, 2017

Mr. Bryan C. Hanson
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; CLINTON POWER STATION, UNIT NO. 1; 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; AND R. E. GINNA NUCLEAR POWER PLANT — PROPOSED ALTERNATIVE TO USE ASME OM CODE CASE OMN-20 (CAC NOS. MF8226–MF8237)

Dear Mr. Hanson:

By application dated July 26, 2016 (Agencywide Documents Access and Management System Accession No. ML16209A496), 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 10 CFR 50.55a(f), "Inservice testing [IST] requirements," and the American Society of Mechanical Engineers (ASME) Code for Operation and Maintenance of Nuclear Power Plants (ASME OM Code) for Braidwood Station, Units 1 and 2; Clinton Power Station, Unit No. 1; 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; and R. E. Ginna Nuclear Power Plant. The proposed alternative would allow the licensee to use ASME OM Code Case OMN-20, "Inservice Test Frequency," as an alternative to the IST frequencies for pumps and valves specified in ASME OM Code, Division 1, Section IST.

Specifically, pursuant to 10 CFR 50.55a(z)(2), the licensee requested to use the alternative on the basis that complying with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety. The U.S. Nuclear Regulatory Commission (NRC) staff has reviewed the subject request and concludes, as set forth in the enclosed safety evaluation, that the licensee has adequately addressed all of the regulatory requirements set forth in 10 CFR 50.55a(z)(2).

Therefore, pursuant to 10 CFR 50.55a(z)(2), the NRC staff authorizes the use of the proposed alternative for the remainder of the current 10-year IST interval for each plant and for the fourth 10-year IST interval at LaSalle County Station, Units 1 and 2, as specified in the application, or until such time as the NRC approves Code Case OMN-20 for general use through a revision of NRC Regulatory Guide 1.192, "Operation and Maintenance Code Case Acceptability, ASME OM Code," and incorporates it by reference in 10 CFR 50.55a, "Codes and standards," whichever occurs first.

B. Hanson

- 2 -

All other requirements of the ASME OM Code for which relief has not been specifically requested and authorized by NRC staff remain applicable.

If you have any questions, please contact Blake Purnell at 301-415-1380 or via e-mail at Blake.Purnell@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "David J. Wrona for". The signature is fluid and cursive.

David J. Wrona, Chief
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. STN 50-456, STN 50-457,
50-461, 50-373, 50-374,
50-352, 50-353, 50-220,
50-410, 50-277, 50-278,
and 50-244

Enclosure:
Safety Evaluation

cc w/encl: Distribution via ListServ



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

PROPOSED ALTERNATIVE TO USE ASME OM CODE CASE OMN-20

BRAIDWOOD STATION, UNITS 1 AND 2;

CLINTON POWER STATION, UNIT NO. 1;

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; AND

R.E. GINNA NUCLEAR POWER PLANT.

EXELON GENERATION COMPANY, LLC

DOCKET NOS. STN 50-456, STN 50-457, 50-461, 50-373, 50-374, 50-352, 50-353,

50-220, 50-410, 50-277, 50-278, AND 50-244

1.0 INTRODUCTION

By application dated July 26, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16209A496), 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 10 CFR 50.55a(f), "Inservice testing [IST] requirements," and the American Society of Mechanical Engineers (ASME) Code for Operation and Maintenance of Nuclear Power Plants (ASME OM Code) for Braidwood Station, Units 1 and 2; Clinton Power Station, Unit No. 1; 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; and R. E. Ginna Nuclear Power Plant. The proposed alternative would allow the licensee to use ASME OM Code Case OMN-20, "Inservice Test Frequency," as an alternative to the IST frequencies for pumps and valves specified in ASME OM Code, Division 1, Section IST.

Specifically, pursuant to 10 CFR 50.55a(z)(2), the licensee requested to use the alternative on the basis that complying with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

Enclosure

2.0 REGULATORY EVALUATION

The regulations in 10 CFR 50.55a(f) require, in part, that IST of certain ASME Code Class 1, 2, and 3 components must meet the requirements of the ASME OM Code and applicable addenda, except where alternatives have been authorized by the NRC.

The regulations in 10 CFR 50.55a(z) state, in part, that alternatives to the ASME Code requirements may be authorized by the NRC if the licensee demonstrates that: (1) the proposed alternative provides an acceptable level of quality and safety, or (2) compliance with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

3.0 TECHNICAL EVALUATION

3.1 Licensee's Alternative Request

The proposed alternative relates to the test frequency requirements for pumps and valves specified in the ASME OM Code, Division 1, Section IST. The licensee provided, as shown in the table below, the currently applicable ASME OM Code editions and Addenda for each plant, and the end date for the current 10-year IST interval.

PLANT	ASME OM CODE	END OF CURRENT IST INTERVAL
Braidwood Station, Units 1 and 2	2001 Edition through 2003 Addenda	July 28, 2018
Clinton Power Station, Unit No. 1	2004 Edition, no Addenda	June 30, 2020
LaSalle County Station, Units 1 and 2	2001 Edition through 2003 Addenda	October 11, 2017
Limerick Generating Station, Units 1 and 2	2004 Edition, no Addenda	January 7, 2020
Nine Mile Point Nuclear Station, Units 1 and 2	2004 Edition, no Addenda	December 31, 2018
Peach Bottom Atomic Power Station, Units 2 and 3	2001 Edition through 2003 Addenda	August 27, 2018
R. E. Ginna Nuclear Power Plant	2004 Edition, no Addenda	December 31, 2019

In addition, the licensee identified that the ASME OM Code, 2004 Edition with 2006 Addenda, will be applicable to the fourth 10-year IST interval at LaSalle County Station, Units 1 and 2, which begins on October 12, 2017, and ends on October 11, 2027.

The licensee proposes to adopt the ASME OM Code Case OMN-20, which was published in conjunction with the ASME OM Code, 2012 Edition. The purpose of this code case is to prescribe a methodology for determining acceptable tolerances for pump and valve test frequencies. This proposed alternative will be used for the remainder of the current 10-year IST interval for each plant and for the fourth 10-year IST interval at LaSalle County Station, Units 1 and 2, or until such time as the NRC approves Code Case OMN-20 for general use through revision of NRC Regulatory Guide 1.192, "Operation and Maintenance Code Case Acceptability, ASME OM Code," and incorporates it by reference in 10 CFR 50.55a, "Codes and standards," whichever occurs first.

3.2 NRC Staff Evaluation

Historically, licensees have applied, and the NRC staff has accepted, the standard technical specification (TS) definitions for IST intervals (including allowable interval extensions) to ASME OM Code-required testing (see Section 3.1.3 of NUREG-1482, Revision 2, "Guidelines for Inservice Testing at Nuclear Power Plants: Inservice Testing of Pumps and Valves and Inservice Examination and Testing of Dynamic Restraints (Snubbers) at Nuclear Power Plants," October 2013 (ADAMS Accession No. ML13295A020)). Recently, the staff reconsidered the allowance of using TS testing intervals and interval extensions for IST not associated with TS surveillance requirements. As noted in Regulatory Issue Summary 2012-10, "NRC Staff Position on Applying Surveillance Requirements 3.0.2 and 3.0.3 to Administrative Controls Program Tests," dated August 23, 2012 (ADAMS Accession No. ML12079A393), the NRC determined that programmatic test intervals cannot be extended in accordance with TS Surveillance Requirement 3.0.2. This includes all IST described in the ASME OM Code not specifically required by TS surveillance requirements.

Following this development, the NRC staff sponsored and co-authored an ASME OM Code inquiry and Code Case to modify the ASME OM Code to include TS-like test interval definitions and interval extension criteria. The resultant Code Case OMN-20 was approved by the ASME Operation and Maintenance Standards Committee on February 15, 2012, with the NRC representative voting in the affirmative. Code Case OMN-20 was subsequently published in conjunction with the ASME OM Code, 2012 Edition. The licensee has proposed to adopt Code Case OMN-20 at its facilities as an alternative to the IST frequencies for pumps and valves specified in the ASME OM Code, Division 1, Section IST.

The NRC staff has determined that requiring the licensee to meet the ASME OM Code requirements and applicable ASME OM Code Cases, without an allowance for defined test intervals and test interval extensions for IST of pumps and valves, would cause a loss of operational flexibility for meeting the ASME OM Code requirements and result in a hardship without a compensating increase in the level of quality and safety. In addition, allowing the usage of Code Case OMN-20 provides reasonable assurance of operational readiness of pumps and valves subject to the ASME OM Code, Division 1, Section IST, requirements. Based on the above, and the prior acceptance by the staff of similar TS test interval definitions and interval extension criteria, the staff concludes that implementation of the test interval definitions and interval extension criteria contained in ASME OM Code Case OMN-20 are acceptable.

4.0 CONCLUSION

As set forth above, the NRC staff has determined that complying with the current ASME OM Code requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety and that the proposed alternative to adopt Code Case OMN-20 provides reasonable assurance that the affected components at the licensee's facilities are operationally ready. Accordingly, the NRC staff concludes that the licensee has adequately addressed all of the regulatory requirements set forth in 10 CFR 50.55a(z)(2) for this alternative.

Therefore, pursuant to 10 CFR 50.55a(z)(2), the NRC staff authorizes the use of the proposed alternative for the remainder of the current 10-year IST interval for each plant and for the fourth 10-year IST interval at LaSalle County Station, Units 1 and 2, as specified in the application (Section 3.1 of this safety evaluation), or until such time as the NRC approves Code Case

OMN-20 for general use through revision of NRC Regulatory Guide 1.192 and incorporates it by reference in 10 CFR 50.55a, whichever occurs first.

All other ASME OM Code requirements for which relief was not specifically requested and approved remain applicable.

Principal Contributor: J. Huang, NRR

BRAIDWOOD STATION, UNITS 1 AND 2; CLINTON POWER STATION, UNIT NO. 1; 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; AND R. E. GINNA NUCLEAR POWER PLANT — PROPOSED ALTERNATIVE TO USE ASME OM CODE CASE OMN-20 (CAC NOS. MF8226–MF8237) DATED

DISTRIBUTION:**PUBLIC**

RidsNrrDorLpl1 Resource
 RidsNrrLASRohrer Resource
 RidsRgn3MailCenter Resource
 RidsNrrPMBraidwood Resource
 RidsNrrPMLimerick Resource
 RidsNrrPMREGinna Resource

LPL3 R/F

RidsNrrDorLpl3 Resource
 RidsNrrDeEpn Resource
 RidsRgn1MailCenter Resource
 RidsNrrPMClinton Resource
 RidsNrrPMPeachBottom Resource
 JHuang, NRR

LPL1 R/F

RidsNrrLALRonewicz Resource
 RidsAcraAcnw_MailCTR Resource
 JBowen, EDO
 RidsNrrPMLaSalle Resource
 RidsNrrPMNineMilePoint Resource

ADAMS Accession No. ML17046A286***by email**

OFFICE	DORL/LPL3/PM	DORL/LPL3/LA	DE/EPNB/BC	DORL/LPL3/BC
NAME	BPurnell	SRohrer	DAlley*	DWrona
DATE	2/16/17	2/15/17	2/14/17	2/21/17

OFFICIAL RECORD COPY