

10 CFR 50.55a(z)

November 1, 2017

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Clinton Power Station, Unit 1
Facility Operating License No. NPF-62
NRC Docket No. 50-461

Dresden Nuclear Power Station, Units 2 and 3
Renewed Facility Operating License Nos. DPR-19 and DPR-25
NRC Docket Nos. 50-237 and 50-249

James A. FitzPatrick Nuclear Power Plant
Renewed Facility Operating License No. DPR-59
NRC Docket No. 50-333

LaSalle County Station, Units 1 and 2
Renewed Facility Operating License Nos. NPF-11 and NPF-18
NRC Docket Nos. 50-373 and 50-374

Nine Mile Point Nuclear Station, Units 1 and 2
Renewed Facility Operating License Nos. DPR-63 and NPF-69
NRC Docket Nos. 50-220 and 50-410

Oyster Creek Nuclear Generating Station
Renewed Facility Operating License No. DPR-16
USNRC Docket No. 50-219

Quad Cities Nuclear Power Station, Units 1 and 2
Renewed Facility Operating License Nos. DPR 29 and DPR 30
NRC Docket Nos. 50-254 and 50-265

Subject: Submittal of Relief Request for an Alternative to the ASME Code – Revise
Main Steam Isolation Valve Partial Stroke Testing Frequency

Pursuant to 10 CFR 50.55a(z)(1), Exelon Generation Company, LLC (Exelon) hereby requests approval of the attached relief request associated with the inservice testing (IST) programs for Clinton Power Station, Unit 1; Dresden Power Station, Units 2 and 3; James A. FitzPatrick Nuclear Power Plant; LaSalle County Station, Units 1 and 2; Nine Mile Point Nuclear Station, Units 1 and 2; Oyster Creek Nuclear Generating Station; and Quad Cities Nuclear Power Station, Units 1 and 2.

The relief request proposes authorization to exercise valves on a limited basis, in accordance with the Surveillance Frequency Control Program, that are currently restricted to cold shutdown testing requirements in accordance with ISTC-3521(b). The basis for this request is provided in the Attachment.

This relief request is for the current and/or next IST interval for Clinton Power Station, Unit 1 (third interval); Dresden Power Station, Units 2 and 3 (fifth interval); James A. FitzPatrick Nuclear Power Plant (fourth and fifth intervals); LaSalle County Station, Units 1 and 2 (fourth interval); Nine Mile Point Nuclear Station, Units 1 and 2 (fourth and third intervals, respectively); Oyster Creek Nuclear Generating Station (fifth interval); and Quad Cities Nuclear Power Station, Units 1 and 2 (fifth interval).

Exelon requests approval of this request by April 30, 2018, to permit incorporation of this testing into the Surveillance Frequency Control Program at each station.

There are no regulatory commitments contained in this letter.

If you have any questions regarding this letter, please contact David Neff at (610) 765-5631.

Respectfully,



David P. Helker
Manager - Licensing & Regulatory Affairs
Exelon Generation Company, LLC

Attachment: Description and Assessment of the Proposed Alternative to the ASME Code to Revise Main Steam Isolation Valve Partial Stroke Testing Frequency

cc: USNRC Regional Administrator - NRC Region I
USNRC Regional Administrator - NRC Region III
USNRC Project Manager, NRR - Clinton Power Station
USNRC Project Manager, NRR - Dresden Power Station
USNRC Project Manager, NRR - James A. FitzPatrick Nuclear Power Plant
USNRC Project Manager, NRR - LaSalle County Station
USNRC Project Manager, NRR - Nine Mile Point Nuclear Station
USNRC Project Manager, NRR - Oyster Creek Nuclear Generating Station
USNRC Project Manager, NRR - Quad Cities Nuclear Power Station
USNRC Senior Resident Inspector - Clinton Power Station
USNRC Senior Resident Inspector - Dresden Power Station
USNRC Senior Resident Inspector - James A. FitzPatrick Nuclear Power Plant
USNRC Senior Resident Inspector - LaSalle County Station
USNRC Senior Resident Inspector - Nine Mile Point Nuclear Station
USNRC Senior Resident Inspector - Oyster Creek Nuclear Generating Station
USNRC Senior Resident Inspector - Quad Cities Nuclear Power Station
A. L. Peterson, NYSERDA
Illinois Emergency Management Agency - Division of Nuclear Safety (w/o att)
R. R. Janati - Bureau of Radiation Protection, Commonwealth of Pennsylvania
Director, Bureau of Nuclear Engineering, New Jersey, Dept. of Environmental Protection

ATTACHMENT

**Description and Assessment of the Proposed Alternative to the ASME Code
to Revise Main Steam Isolation Valve Partial Stroke Testing Frequency**

Clinton Power Station, Unit 1
Facility Operating License No. NPF-62

Dresden Nuclear Power Station, Units 2 and 3
Renewed Facility Operating License Nos. DPR-19 and DPR-25

James A. FitzPatrick Nuclear Power Plant
Renewed Facility Operating License No. DPR-59

LaSalle County Station, Units 1 and 2
Renewed Facility Operating License Nos. NPF-11 and NPF-18

Nine Mile Point Nuclear Station, Units 1 and 2
Renewed Facility Operating License Nos. DPR-63 and NPF-69

Oyster Creek Nuclear Generating Station
Renewed Facility Operating License No. DPR-16

Quad Cities Nuclear Power Station, Units 1 and 2
Renewed Facility Operating License Nos. DPR-29 and DPR-30

**Description and Assessment of the Proposed Alternative to the ASME Code
to Revise Main Steam Isolation Valve Partial Stroke Testing Frequency
Request in Accordance with 10 CFR 50.55a(z)(1)**

1. ASME Code Components Affected

<u>Plant</u>	<u>Valve Numbers</u>	<u>Function</u>	<u>ASME Code Class</u>	<u>ASME OM Code Category</u>
Clinton Power Station, Unit 1	1B21-F022A, B, C and D 1B21-F028A, B, C and D	MSIV	1	A
Dresden Nuclear Power Station, Units 2 and 3	2-0203-1A, B, C and D 2-0203-2A, B, C and D 3-0203-1A, B, C and D 3-0203-2A, B, C and D	MSIV	1	A
James A. FitzPatrick Nuclear Power Plant	29AOV-80A, B, C and D 29AOV-86A, B, C and D	MSIV	1	A
LaSalle Units 1 and 2	1B21-F022A, B, C and D 1B21-F028A, B, C and D 2B21-F022A, B, C and D 2B21-F028A, B, C and D	MSIV	1	A
Nine Mile Point Nuclear Station, Unit 1	IV-01-03 and 04	MSIV	1	A
Nine Mile Point Nuclear Station, Unit 2	2MSS*AOV6A, B, C and D 2MSS*AOV7A, B, C and D	MSIV	1	A
Oyster Creek Nuclear Generating Station	V-01-07, 08, 09 and 10	MSIV	1	A
Quad Cities Nuclear Power Station, Units 1 and 2	1-0203-001A, B, C and D 1-0203-002A, B, C and D 2-0203-001A, B, C and D 2-0203-002A, B, C and D	MSIV	1	A

2. Applicable Code Edition and Addenda

<u>Plant</u>	<u>Interval</u>	<u>Edition</u>	<u>Start</u>	<u>End</u>
Clinton Power Station, Unit 1	Third	2004 Edition	July 1, 2010	June 30, 2020
Dresden Nuclear Power Station, Units 2 and 3	Fifth	2004 Edition through 2006 Addenda	November 1, 2013	October 31, 2023
James A. FitzPatrick Nuclear Power Plant	Fourth	2001 Edition through 2003 Addenda	October 1, 2007	May 31, 2018
James A. FitzPatrick Nuclear Power Plant	Fifth	2004 Edition through 2006 Addenda	June 1, 2018	September 30, 2027
LaSalle Units 1 and 2	Fourth	2004 Edition, through 2006 Addenda	October 12, 2017	October 11, 2027
Nine Mile Point Nuclear Station, Unit 1	Fourth	2004 Edition	January 1, 2009	December 31, 2018
Nine Mile Point Nuclear Station, Unit 2	Third	2004 Edition	January 1, 2009	December 31, 2018

**Description and Assessment of the Proposed Alternative to the ASME Code
to Revise Main Steam Isolation Valve Partial Stroke Testing Frequency
Request in Accordance with 10 CFR 50.55a(z)(1)**

<u>Plant</u>	<u>Interval</u>	<u>Edition</u>	<u>Start</u>	<u>End</u>
Oyster Creek Nuclear Generating Station	Fifth	2004 Edition, through 2006 Addenda	October 14, 2012	October 13, 2022
Quad Cities Nuclear Power Station, Units 1 and 2	Fifth	2004 Edition, through 2006 Addenda	February 18, 2013	February 17, 2023

3. Applicable Code Requirement

ISTC-3520, "Exercising Requirements", Section ISTC-3521(b) states "if full-stroke exercising during operation at power is not practicable, it may be limited to part-stroke during operation at power and full-stroke during cold shutdown".

4. Reason for Request

Pursuant to 10 CFR 50.55a, "Codes and Standards", paragraph (z)(1), relief is requested from the requirement of ASME OM Code ISTC-3521(b). The basis of the relief request is the proposed alternative would provide an acceptable level of quality and safety.

The existing Inservice Testing (IST) Program Cold Shutdown Justifications for full stroke testing, under ISTC-3521(c) at each station listed in this request, will be modified to remove the existing quarterly partial stroke exercise testing of the Main Steam Isolation Valves (MSIV), under ISTC-3521(b). This will be done to address the potential for the valves to fully close inadvertently during the quarterly exercise testing. Full closure of the valves, at power, will cause a reactivity event and potential loss of power production of the affected unit. Challenges like these, and their potential consequence, have also been recognized in NUREG 1482 Revision 2. The NUREG discusses activities generating these challenges and states they should be considered impracticable, thereby supporting the Cold Shutdown Justification (CSJ) principal arguments.

In each station's Technical Specifications (TS), the frequency for the Reactor Protection System (RPS) Instrumentation Surveillance Requirement (SR) Channel Functional Test (CFT) is stated as "In accordance with the Surveillance Frequency Control Program (SFCP)." The specific TS SR for each station is provided in the table below. The only practical method to perform the RPS CFT for the MSIV position switch input into the RPS logic is to actually stroke the MSIV. There are no other TS compliant methods available without reducing reactor power and entering the normally inerted primary containment. This would result in unwarranted power reductions and personnel radiation exposures.

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<u>Plant</u>	<u>Technical Specifications Section for RPS CFT</u>
Clinton Power Station, Unit 1	3.3.1.1.9
Dresden Nuclear Power Station, Units 2 and 3	3.3.1.1.18
James A. FitzPatrick Nuclear Power Plant	3.3.1.1.8
LaSalle Units, 1 and 2	3.3.1.1.9
Nine Mile Point Nuclear Station, Unit 1	4.2.7.C and 4.6.2.a(6)
Nine Mile Point Nuclear Station, Unit 2	3.3.1.1.8
Oyster Creek Nuclear Generating Station	4.1.1.(10)
Quad Cities Nuclear Power Station, Units 1 and 2	3.3.1.1.18

The stations listed in this relief request have elected, due to recent documentation describing MSIV industry test failures, to utilize the SFCP for the CFT to extend the test frequency of the CFT, over a period of time, up to a refueling outage. A refueling outage test frequency would eliminate any stroking of MSIVs during power operation of the units.

It was realized that in order to utilize the SFCP for the MSIVs, the valves would have to be partial stroke exercised at power, for a number of years, to achieve the final goal of stroking at a refueling outage frequency. This methodology would allow for a progressively longer test interval until the final refueling outage testing interval was achieved. This could not be done with the CSJ in the IST Program, as the stroking of the valves in accordance with the SFCP would be in contradiction with the CSJ, which would not permit stroking of the valves during normal power operation.

5. Proposed Alternative and Basis for Use

Exelon proposes that the stations listed in this relief request continue partial stroke exercising the MSIVs for the sole purpose of supporting the requirements of the SFCP testing intervals that would require progressively longer surveillance intervals until the final refueling outage frequency was achieved. The CSJ would restrict any other stroking of the MSIVs. Both the CSJ and the SFCP are needed together to address the removal of the challenges of partial stroke exercising, as defined in the CSJ, to support safer and more reliable continued operation of the units.

**Description and Assessment of the Proposed Alternative to the ASME Code
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Duration of Proposed Alternative

This relief request will be applied for the duration of the inservice inspection intervals defined in Section 2 of this relief request including the current 10-year IST interval for each station and the next 10-year IST interval for James A. FitzPatrick Power Station.

6. Precedent

Peach Bottom Atomic Power Station, Units 2 and 3 – Safety Evaluation of Relief Request Number 01A-VRR-4 Regarding the Fourth 10-Year Interval of the Inservice Testing Program, SE dated April 28, 2017 (ADAMS Accession No. ML17108A762)