

JAFP-18-0038

April 19, 2018

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001James A. FitzPatrick Nuclear Power Plant
Renewed Facility Operating License No. DPR-59
NRC Docket No. 50-333

Subject: Response to Request for Additional Information
Application to Revise Technical Specifications to Adopt TSTF-542, "Reactor Pressure Vessel Water Inventory Control," Revision 2 (EPID: L-2017-LLA-0311)

- References:
1. Letter from James Barstow (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, "Application to Revise Technical Specifications to Adopt TSTF-542, "Reactor Pressure Vessel Water Inventory Control," Revision 2," JAFP-19-0093, dated October 2, 2017 (ML17275A520)
 2. Electronic mail from R. Haskell II, U.S. Nuclear Regulatory Commission, to Christian Williams, Exelon Generation Company, LLC, "James A. FitzPatrick Nuclear Power Plant, Unit 1 – Request for Information to Adopt Traveler TSTF-542 "RPV Water Inventory Control" (EPID: L-2017-LLA-0311)," dated March 26, 2018 (ML18085A692)

By letter dated October 2, 2017 (ADAMS Accession No. ML17275A520) (Reference 1), Exelon Generation Company, LLC (Exelon), requested approval to adopt Technical Specifications Task Force (TSTF) Traveler TSTF-542, "Reactor Pressure Vessel Water Inventory Control," Revision 2, which changes the Technical Specifications (TSs) for James A. FitzPatrick Nuclear Power Plant (JAFNPP).

The NRC staff reviewed the information provided that supports the proposed amendment and identified the need for additional information in order to complete their evaluation of the amendment request. The request for additional information (RAI) was sent from the NRC to Exelon by electronic mail on March 26, 2018 (Reference 2). The NRC requested a response by April 23, 2018.

Attachment 1 to this letter provides a restatement of the RAI question followed by our response. Attachment 2 provides the revised TS markup as a result of the RAI. In addition to responding to this RAI Exelon is providing corrected marked up TS pages to address markup discrepancies identified during the review. A summary of the discrepancies is included in Attachment 3 and the corrected TS pages are included in Attachment 4.

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Exelon has reviewed the information supporting a finding of no significant hazards consideration, and the environmental consideration, that were previously provided to the NRC in Attachment 1 of the Reference 1 letter. Exelon has concluded that the information provided in this response does not affect the bases for concluding that the proposed license amendment does not involve a significant hazards consideration under the standards set forth in 10 CFR 50.92. In addition, Exelon has concluded that the information in this response does not affect the bases for concluding that neither an environmental impact statement nor an environmental assessment needs to be prepared in connection with the proposed amendment.

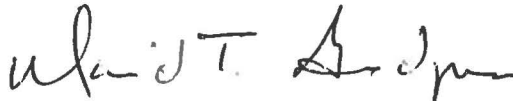
There are no new regulatory commitments in this response.

In accordance with 10 CFR 50.91, "Notice for public comment; State consultation," paragraph (b), Exelon is notifying the State of New York of this RAI response by transmitting a copy of this letter and its attachments to the designated State Official.

If you have any questions or require additional information, please contact Christian Williams at 610-765-5729.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 19th day of April 2018.

Respectfully,



David T. Gudger
Manager, Licensing and Regulatory Affairs
Exelon Generation Company, LLC

Attachments:

1. Response to Request for Additional Information
2. Revised Markup of Proposed Technical Specification Page 3.3.5.2-2
3. Summary of Additional Markup Discrepancies and Corrections
4. Revised Markup of Technical Specifications Pages 3.5.2-1 thru 3.5.2-4 and 3.5.2-6

cc: Regional Administrator - NRC Region I
NRC Senior Resident Inspector - JAFNPP
NRC Project Manager, NRR - JAFNPP
NYSPSC
NYSE RDA

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ATTACHMENT 1

Response to Request for Additional Information

By letter dated October 2, 2017 (ADAMS Accession No. ML17275A520), Exelon Generation Company, LLC (Exelon), requested approval to adopt Technical Specifications Task Force (TSTF) Traveler TSTF-542, "Reactor Pressure Vessel Water Inventory Control," Revision 2, which changes the Technical Specifications (TSs) for James A. FitzPatrick Nuclear Power Plant (JAFNPP).

The NRC staff reviewed the information provided that supports the proposed amendment and identified the need for additional information in order to complete their evaluation of the amendment request. The request for additional information (RAI) was sent from the NRC to Exelon by electronic mail message on March 26, 2018. Below is a restatement of the question followed by our response.

Question 1 (JAFNPP-RAI-01):

Background:

In Attachment 1 (of the LAR), for Variation 2.2.6, the licensee states that Surveillance Requirement (SR) SR 3.3.5.2.3, "Perform LOGIC SYSTEM FUNCTIONAL TEST," is not applicable because the "manual initiation" logic does not exist in the JAFNPP design. However, in Attachment 2 (of the LAR), on proposed TS markup page 3.3.5.2-2, SR 3.3.5.2.3 was included. Furthermore, proposed TS Table 3.3.5.2-1, "Reactor Pressure Vessel (RPV) Water Inventory Control Instrumentation," has no reference to SR 3.3.5.2.3.

Request:

Since this appears to indicate the proposed markups for the SR (page 3.3.5.2-2) and TS Table 3.3.5.2-1 (page 3.3.5.2-3) do not align, either provide clarification or correct the proposed TS markup page(s) as appropriate.

Response

SR 3.3.5.2.3 was included in error on page 3.3.5.2-2. SR 3.3.5.2.3 has been removed from page 3.3.5.2-2. See revised TS markup (Attachment 2).

References:

1. Letter from James Barstow (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, "Application to Revise Technical Specifications to Adopt TSTF-542, "Reactor Pressure Vessel Water Inventory Control," Revision 2," dated October 2, 2017 (ML17275A520).
2. Electronic mail from R. Haskell II, U.S. Nuclear Regulatory Commission, to Christian Williams, Exelon Generation Company, LLC, "James A. FitzPatrick Nuclear Power Plant, Unit 1 – Request for Information to Adopt Traveler TSTF-542 "RPV Water Inventory Control" (EPID: L-2017-LLA-0311)" dated March 26, 2018 (ML18085A692)

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ATTACHMENT 2

Revised Markup of Proposed Technical Specifications Page 3.3.5.2-2

TS Page
3.3.5.2-2

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
E. Required Action and associated Completion Time of Condition C or D not met.	E.1 Declare associated low pressure ECCS injection/spray subsystem inoperable.	Immediately

SURVEILLANCE REQUIREMENTS

-----NOTE-----

Refer to Table 3.3.5.2-1 to determine which SRs apply for each ECCS Function.

SURVEILLANCE	FREQUENCY
SR 3.3.5.2.1 Perform CHANNEL CHECK.	In accordance with the Surveillance Frequency Control Program
SR 3.3.5.2.2 Perform CHANNEL FUNCTIONAL TEST.	In accordance with the Surveillance Frequency Control Program
SR 3.3.5.2.3 Perform LOGIC SYSTEM FUNCTIONAL TEST.	In accordance with the Surveillance Frequency Control Program

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ATTACHMENT 3

Summary of Additional Markup Discrepancies and Corrections

The following discrepancies were identified during the review of the markup pages for TS 3.5.2:

DISCREPANCY 1 (pg 3.5.2-1): In Attachment 2 of Reference 1, in the LCO 3.5.2 statement, the greater than or equal to symbol (\geq) and the TS Logical Connector term 'AND' both include strikeouts (crossed out).

CORRECTION 1: Neither the symbol nor the logical connector should have been crossed out. The strikeouts have been removed.

DISCREPANCY 2 (pg 3.5.2-2): The proposed markup for CONDITION C does not conform with the Traveler TSTF-542, Rev. 2. CONDITION C states, "DRAIN TIME < 36 hours and > 8 hours" while the Traveler TSTF-542, Revision 2, states "DRAIN TIME < 36 hours and \geq 8 hours."

CORRECTION 2: CONDITION C on the markup has been revised to be consistent with the TSTF-542 traveler as follows: "DRAIN TIME < 36 hours and \geq 8 hours"

DISCREPANCY 3 (pg 3.5.2-2): The proposed markup for the TS Logical Connector term 'AND,' located between REQUIRED ACTIONS C.2 and C.3, includes a strikeout.

CORRECTION 3: This term should NOT have been crossed out. The strikeout has been removed.

DISCREPANCY 4 (pg 3.5.2-2): The proposed markup for REQUIRED ACTION C.3 states, "Verify one standby gas treatment subsystem is capable of operation in less than the DRAIN TIME." Versus the Traveler TSTF-542, Revision 2, which states, "Verify one standby gas treatment subsystem is capable of being placed in operation in less than the DRAIN TIME."

CORRECTION 4: REQUIRED ACTION C.3 on the markup has been revised to be consistent with the TSTF-542 traveler as follows: "Verify one standby gas treatment subsystem is capable of being placed in operation in less than the DRAIN TIME."

DISCREPANCY 5 (pg 3.5.2-3): The proposed markup for REQUIRED ACTION D.1 includes a strikeout in the symbol for " \geq 36 hours."

CORRECTION 5: The symbol should NOT have been crossed out. The strikeout has been removed.

DISCREPANCY 6 (pg 3.5.2-4): The proposed markup for CONDITION E includes a strikeout in the TS Logical Connector term 'OR.' Additionally, for REQUIRED ACTION E.1 the DRAIN TIME requirement includes the ">" symbol vs. " \geq " for the 36 hours parameter.

CORRECTION 6: The symbol should NOT have been crossed out. The strikeout has been removed.

DISCREPANCY 7 (pg 3.5.2-4): The proposed markup for SR 3.5.2.1 includes the ">" symbol vs. " \geq " for the 36 hours parameter.

CORRECTION 7: SR 3.5.2.1 should be \geq 36 hours. This has been corrected in the attached markup.

DISCREPANCY 8 (pg 3.5.2-6): The proposed markup for SR 3.5.2.6 includes a strikeout for the " \geq " symbol.

CORRECTION 8: The symbol should NOT have been crossed out. The strikeout has been removed.

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ATTACHMENT 4

Revised Markup of Technical Specifications Pages 3.5.2-1 thru 3.5.2-4 and 3.5.2-6

TS Pages

3.5.2-1

3.5.2-2

3.5.2-3

3.5.2-4

3.5.2-6

3.5 EMERGENCY CORE COOLING SYSTEM (ECCS), REACTOR PRESSURE VESSEL (RPV) WATER INVENTORY CONTROL AND REACTOR CORE ISOLATION COOLING (RCIC) SYSTEM

3.5.2 ~~ECCS – Shutdown~~ Reactor Pressure Vessel (RPV) Water Inventory Control

LCO 3.5.2 DRAIN TIME of RPV water inventory to the top of active fuel (TAF) shall be \geq 36 hours

AND

~~One Two~~ low pressure ECCS injection/spray subsystems shall be OPERABLE.

-----NOTE-----
A Low Pressure Coolant Injection (LPCI) subsystem may be considered OPERABLE during alignment and operation for decay heat removal if capable of being manually realigned and not otherwise inoperable.

APPLICABILITY: MODES ~~4, and 5~~
~~MODE 5, except with the spent fuel storage pool gates removed and water level \geq 22 ft 2 inches over the top of the reactor pressure vessel flange.~~

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One Required low pressure ECCS injection/spray subsystem inoperable.	A.1 Restore required low pressure ECCS injection/spray subsystem to OPERABLE status.	4 hours
B. Required Action and associated Completion Time of Condition A not met.	B.1 Initiate action to establish a method of water injection capable of operating without offsite electrical power. suspend operations with a potential for draining the reactor vessel (OPDRVs).	Immediately

C. DRAIN TIME < 36 hours and ≥ 8 hours. Two required low pressure ECCS injection/spray subsystems inoperable. C.	C.1 Verify secondary containment boundary is capable of being established in less than the DRAIN TIME. Initiate action to suspend OPDRVs. <u>AND</u>	Immediately 4 hours
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(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
	C.2 Verify each secondary containment penetration flow path is capable of being isolated in less than the DRAIN TIME. Restore one required low pressure ECCS injection/spray subsystem to OPERABLE status. <u>AND</u>	4 hours
	C.3 Verify one standby gas treatment subsystem is capable of being placed in operation in less than the DRAIN TIME	4 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>D. Required Action C.2 and associated Completion Time not met. DRAIN TIME < 8 hours</p>	<p>D.1 -----NOTE----- Required ECCS injection/spray subsystem or additional method of water injection shall be capable of operating without offsite electrical power. ----- Initiate action to restore secondary containment to OPERABLE status. establish an additional method of water injection with water sources capable of maintaining RPV water level > TAF for \geq 36 hours.</p> <p style="text-align: center;"><u>AND</u></p>	<p>Immediately</p>
	<p>D.2 Initiate action to establish secondary containment boundary restore one standby gas treatment subsystem to OPERABLE status.</p> <p style="text-align: center;"><u>AND</u></p>	
	<p>D.3 Initiate action to isolate each secondary containment penetration flow path or verify it can be manually isolated from the control room. restore Isolation capability in each required secondary containment penetration flow path not isolated.</p> <p style="text-align: center;"><u>AND</u></p>	
	<p>D.4 Initiate action to verify one standby gas treatment</p>	

	subsystem is capable of being placed in operation	
E. Required Action and associated Completion Time of Condition C or D not met. <u>OR</u> DRAIN TIME < 1 hour	E.1 Initiate action to restore DRAIN TIME to \geq 36 hours	Immediately

SURVEILLANCE REQUIREMENTS

SURVELLANCE		FREQUENCY
SR 3.5.2.1	Verify DRAIN TIME \geq 36 hours	In accordance with the Surveillance Frequency Control Program
SR 3.5.2.24	Verify, for each -a required low pressure coolant injection (LPCI) subsystem, the suppression pool water level is \geq 10.33 ft.	In accordance with the Surveillance Frequency Control Program

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY								
<p>SR 3.5.2.65 Operate the required ECSS injection/spray subsystem through the recirculation line for ≥ 10 minutes. Verify each required ECSS pump develops the specified flow rate against a system head corresponding to the specified reactor pressure above primary containment pressure.</p> <p style="text-align: center;">SYSTEM HEAD CORRESPONDING TO A REACTOR PRESSURE NO. ABOVE PRIMARY OF CONTAINMENT SYSTEM FLOW RATE PUMPS PRESSURE OF</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td>CS</td> <td>≥ 4265 gpm</td> <td>1</td> <td>≥ 113 psi</td> </tr> <tr> <td>LPCI</td> <td>≥ 7700 gpm</td> <td>1</td> <td>≥ 20 psi</td> </tr> </table>	CS	≥ 4265 gpm	1	≥ 113 psi	LPCI	≥ 7700 gpm	1	≥ 20 psi	<p>In accordance with the Inservice Testing Program Surveillance Frequency Control Program</p>
CS	≥ 4265 gpm	1	≥ 113 psi						
LPCI	≥ 7700 gpm	1	≥ 20 psi						
<p>SR 3.5.2.7 Verify each valve credited for automatically isolating a penetration flow path actuates to the isolation position on an actual or simulated isolation signal.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>								
<p>SR 3.5.2.86 ----- -NOTE ----- Vessel injection/spray may be excluded. -----</p> <p>Verify each the required ECSS injection/spray subsystem can be manually operated. actuates on an actual or simulated automatic initiation signal.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>								