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200 Exelon Way
Kennett Square, PA 19348

www.exeloncorp.com

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

James A. FitzPatrick Nuclear Power Plant, Unit 1
Renewed Facility Operating License Nos. DPR-59
NRC Docket Nos. 50-333

Subject: Supplemental Response Concerning License Amendment Request to Revise Technical Specifications to Adopt TSTF-542, "Reactor Pressure Vessel Water Inventory Control," Revision 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 message from Lisa Williams (Boiling Water Reactor Owners Group (BWROG), Licensing Committee Chairman (TSTF Committee)) to BWROG Members – "TSTF-542 issue re: NUREG-1433 Reactor Steam Dome Pressure – Low," dated December 14, 2017

By letter dated October 2, 2017, (Reference 1), Exelon Generation Company, LLC, (Exelon) submitted a License Amendment Request (LAR) for James A. FitzPatrick Nuclear Power Plant (JAFNPP), Unit 1, requesting changes to the Technical Specifications (TS) requirements related to Operations with a Potential for Draining the Reactor Vessel (OPDRVs) with new requirements on Reactor Pressure Vessel Water Inventory Control (RPV WIC) to protect Safety Limit 2.1.1.3. Safety Limit 2.1.1.3 requires reactor vessel water level to be greater than the top of active irradiated fuel. The requested TS changes were submitted based on Technical Specifications Task Force (TSTF) Traveler TSTF-542, *"Reactor Pressure Vessel Water Inventory Control,"* Revision 2.

In an electronic mail message distributed to Boiling Water Reactor Owners Group (BWROG) members dated December 14, 2017 (Reference 2), Exelon was informed by the BWROG/ TSTF Committee of an administrative oversight in the TSTF-542 TS mark-ups for the model application, in that a note was inadvertently omitted from NUREG-1433 Table 3.3.5.2-1 Functions 1.a and 2.a. Without the note, the Reactor Pressure – Low functions are required to be operable for all low pressure Emergency Core Cooling System (ECCS) subsystems, regardless of whether they are credited for meeting applicable TS for RPV WIC.

Prior to the model application for TSTF-542, NUREG-1433 Functions 1.c and 2.c in TS Table 3.3.5.1-1 had a Mode 4 and 5 applicability modified by a note specifying that these functions were only required when the associated ECCS were required to be operable per Limiting Condition for Operation (LCO) 3.5.2, "ECCS Shutdown." In the model application for TSTF-542, Functions 1.c and 2.c were transferred to Table 3.3.5.2-1 as Functions 1.a and 2.a; however, the note was not transferred with these functions although the applicable TS Bases indicates that it had been. For the JAF submittal, this information is included in TS Table 3.3.5.2-1, "RPV Water Inventory Control Instrumentation," as depicted in the excerpt below.

Table 3.3.5.2-1 (page 1 of 1)

Reactor Pressure Vessel (RPV) Water Inventory Control Instrumentation

	FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1.	Core Spray					
a	a. Reactor Pressure – Low (Injection Permissive)	4, 5	4	C	SR 3.3.5.2.1 SR 3.3.5.2.2	≤ 490 psig
	b. Core Spray Pump Discharge Flow – Low (Bypass)	4, 5	1 per pump (a)	D	SR 3.3.5.2.1 SR 3.3.5.2.2	≥ 510 gpm and ≤ 980 gpm
	c. Core Spray Pump Discharge Pressure – High (Bypass)	4, 5	1 per pump (a)	D	SR 3.3.5.2.1 SR 3.3.5.2.2	≥ 90 psig and ≤ 110 psig
2.	Low Pressure Coolant Injection (LPCI) System					
a	a. Reactor Pressure – Low (Injection Permissive)	4, 5	4	C	SR 3.3.5.2.1 SR 3.3.5.2.2	≤ 490 psig
b	b. Low Pressure Coolant Injection Pump Discharge Flow – Low (Bypass)	4, 5	1 per pump (a)	D	SR 3.3.5.2.1 SR 3.3.5.2.2	≥ 1040 gpm and ≤ 1665 gpm

Without the footnote, Reactor Pressure – Low functions (i.e., Functions 1.a and 2.a) are required to be operable for all low pressure ECCS subsystems, regardless of whether the subsystems are credited to meet applicable TS. In Modes 4 and 5, these functions only serve to allow opening of the ECCS injection valves. Since reactor pressure is at atmospheric pressure in Modes 4 and 5, the functions are not needed to protect low pressure piping from excessive pressure. Requiring the functions for all ECCS subsystems is unnecessary.

Accordingly, the attachment contains copies of the revised TS page mark-up for JAF which reflects the incorporation of the missing note for Functions 1.a and 2.a in Table 3.3.5.2-1.

Exelon has reviewed the information supporting a finding of No Significant Hazards Consideration and the Environmental Consideration provided to the NRC in the Reference 1 letter. The supplemental information provided in this submittal does not affect the bases for concluding that the proposed license amendment does not involve a significant hazards consideration. In addition, the supplemental information provided in this submittal 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 regulatory commitments contained in this submittal.

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 22nd day of January 2018.

Respectfully,

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

Attachment: Updated Technical Specifications Page Mark-up

cc: w/ Attachment
NRC Region I, Regional Administrator
NRC Project Manager, NRR - JAF
NRC Senior Resident Inspector - JAF

ATTACHMENT

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

NRC Docket Nos. 50-333

Renewed Facility Operating License Nos. DPR-59

Supplemental Response
License Amendment Request
Application to Revise TS to Adopt TSTF-542

Updated Technical Specifications Page Mark-up

Unit 1

3.3.5.2-3

Table 3.3.5.2-1 (page 1 of 1)
Reactor Pressure Vessel (RPV) Water Inventory Control Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. Core Spray					
a. Reactor Pressure – Low (Injection Permissive)	4, 5	4(a)	C	SR 3.3.5.2.1 SR 3.3.5.2.2	≤ 490 psig
b. Core Spray Pump Discharge Flow – Low (Bypass)	4, 5	1 per pump (a)	D	SR 3.3.5.2.1 SR 3.3.5.2.2	≥ 510 gpm and ≤ 980 gpm
c. Core Spray Pump Discharge Pressure – High (Bypass)	4, 5	1 per pump (a)	D	SR 3.3.5.2.1 SR 3.3.5.2.2	≥ 90 psig and ≤ 110 psig
2. Low Pressure Coolant Injection (LPCI) System					
a. Reactor Pressure – Low (Injection Permissive)	4, 5	4(a)	C	SR 3.3.5.2.1 SR 3.3.5.2.2	≤ 490 psig
b. Low Pressure Coolant Injection Pump Discharge Flow – Low (Bypass)	4, 5	1 per pump (a)	D	SR 3.3.5.2.1 SR 3.3.5.2.2	≥ 1040 gpm and ≤ 1665 gpm
3. RHR System Isolation					
a. Reactor Vessel Water Level – Low, Level 3	(b)	2 in one trip system	B	SR 3.3.5.2.1 SR 3.3.5.2.2	≥ 177 inches
4. Reactor Water Cleanup (RWCU) System Isolation					
a. Reactor Vessel Water Level – Low Level 3	(b)	2 in one trip system	B	SR 3.3.5.2.1 SR 3.3.5.2.2	≥ 177 inches

(a) Associated with an ECCS subsystem required to be OPERABLE by LCO 3.5.2, “Reactor Pressure Vessel (RPV) Water Inventory Control.”
(b) When automatic isolation of the associated penetration flow path(s) is credited in calculating DRAIN TIME.