

JAFP-20-0026

March 31, 2020

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

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

SUBJECT: Response to Request for Additional Information to Support Review of a License Amendment Request to Revise the Allowable Value for Reactor Water Cleanup (RWCU) System Primary Containment Isolation

- References:**
1. Letter from J. Barstow (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, "License Amendment Request – Proposed Change to Technical Specifications to Revise the Allowable Value for Reactor Water Cleanup (RWCU) System Primary Containment Isolation" (ML19248B085) dated September 5, 2019
 2. E-mail from Samson Lee (Nuclear Regulatory Commission Project Manager for the James A. FitzPatrick Nuclear Power Plant) to Enrique Villar (Exelon Nuclear Senior Licensing Engineer) titled "FitzPatrick request for additional information: License Amendment Request for Change to the Technical Specifications to Revise the Allowable Value for Reactor water Cleanup (RWCU) System Primary Containment Isolation (EPID: L2019-LLA-0190)," dated March 5, 2020.

By letter dated September 5, 2019, (Reference 1), Exelon Generation Company, LLC (Exelon) requested a change to the James A. FitzPatrick (JAF) Technical Specifications (TS) in accordance with 10 CFR 50.90. The proposed amendment request would revise the TS Allowable Value for Reactor Water Clean Up (RWCU) isolation on low Reactor Pressure Vessel (RPV) water level from Level 3 (≥ 177 inches) to Level 2 (≥ 107 inches). The NRC staff has reviewed the LAR and determined that additional information is required to complete the review. These additional RAIs were discussed with the NRC Staff in a clarification call held on March 3, 2020, and it was agreed to a response by April 6, 2020.

Attachment 1 to this letter contains the NRC's request for additional information immediately followed by Exelon's response.

Exelon has reviewed the information supporting a finding of no significant hazards consideration and the environmental consideration provided to the NRC in Reference 1.

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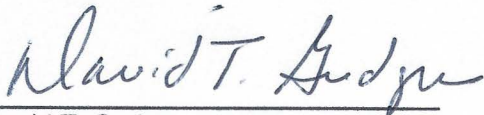
The information attached to this letter does not affect the bases for concluding that the proposed license amendment does not involve a significant hazards consideration. Furthermore, the information attached to this letter does not affect the bases for concluding that neither an environmental impact statement nor an environmental assessment needs to be prepared in connection with the proposed amendment.

There are no commitments contained in this response.

If you should have any questions regarding this submittal, please contact Enrique Villar at 610-765-5736.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 31st day of March 2020.

Respectfully,



David T. Gudger
Sr, Manager, Licensing
Exelon Generation Company, LLC

Attachment: 1. Response to Request for Additional Information

cc: Regional Administrator – NRC Region I
NRC Senior Resident Inspector – JAF
NRC Project Manager, NRR – JAF
A. L. Peterson, NYSERDA

ATTACHMENT 1

Response to Request for Additional Information License Amendment Request for Change to the Technical Specifications to Revise the Allowable Value for Reactor Water Cleanup (RWCU) System Primary Containment Isolation

By letter dated September 5, 2019 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML19248B085), as supplemented by letter dated November 6, 2019 (ADAMS Accession No. ML19310D579), Exelon Generation Company, LLC (Exelon, the licensee), submitted a license amendment request (LAR) proposing changes to the technical specifications (TS) for the James A. FitzPatrick Nuclear Power Plant (JAF). The proposed changes revise the JAF TS Allowable Value for Reactor Water Cleanup (RWCU) System isolation on low Reactor Pressure Vessel (RPV) water level from Level 3 (≥ 177 inches) to Level 2 (≥ 107 inches) in Tables 3.3.6.1-1 and 3.3.5.2-1. The NRC staff has reviewed the LAR and determined that additional information is required to complete the review. The NRC staff's requests for additional information (RAIs) are listed below. These RAIs are in the instrumentation and controls area. A clarification call was held on March 3, 2020. The Exelon staff indicated that there was no proprietary or sensitive information. The Exelon staff requested, and NRC agreed, to a RAI response by April 6, 2020.

Instrumentation and Controls

The following information is needed to verify compliance with 10 CFR 50.36(c)(1)(ii)(A). To assess the acceptability of the setpoints, the staff is using the guidance of NRC Regulatory Guide 1.105, Revision 3, to evaluate whether the licensee has reasonably demonstrated that the channel setting has adequate margin to enable the timely correction of an abnormal situation that could exceed safety limits.

EICB-RAI 1

The Elevated Static Pressure Effect for Rosemount 1153 transmitters (SP1) is described in Section 6.2.1.6 of calculations JAF-CALC-NBI-00205, Rev. 0 and JAF-CALC-NBI-00206, Rev. 0. The calculations consider the elevated static pressure zero shift effect as a random term and not as a bias term. Based on the range (variation) of possible reactor pressure conditions that are expected to be present during design basis events, and the manner in which the static pressure zero shift has been accounted for in the calibration of the transmitter, please explain why this effect has been treated as a random uncertainty term. If the transmitter calibration procedures have been used to account for the elevated static pressure zero effect, then describe the provisions within the calibration procedure or within the calculation methodology that enable the resulting estimated static pressure effect uncertainty to be treated as a random error term.

Exelon's Response to EICB-RAI 1

Rosemount Technical Support Engineer explained that the Static Pressure Effect is divided into two effects: a Static Pressure Zero Effect, which is a random uncertainty, and a Static Pressure Span Effect, which is a biased uncertainty that can be calibrated out. If the Static Pressure Span Effect bias is accounted for, the random uncertainty is as described in the product data sheet and manual. If the bias is not accounted for, the Static Pressure Span Effect includes the bias and random uncertainties.

At JAF, the static pressure span correction has been included in the calibration endpoints for all Rosemount Transmitters according to our calibration procedure developmental reference EDE-21-0889 Rev. 00 titled "Fitzpatrick Reactor Vessel Water Level Indication Evaluation." Therefore, the Static Pressure Zero Effect is treated as a random uncertainty.

EICB-RAI 2

The Radiation Effect for Rosemount 1153 transmitters (RE1) is described in Section 6.2.1.4 of calculations JAF-CALC-NBI-00205, Rev. 0 and JAF-CALC-NBI-00206, Rev. 0. The calculations assume this effect to be zero (0). Please justify why the radiation effect on the reactor water level transmitters located inside the reactor building may be assumed to be zero (0) for the high energy line break events expected to be mitigated by the RWCU isolation system.

Exelon's Response to EICB-RAI 2

Environmental Qualification of Electrical Equipment outside of Primary Containment includes consideration of RWCU High Energy Line Breaks (HELB). The JAF HELB analysis is based on system isolation due to high area temperatures in spaces enclosing postulated break locations. No credit is taken for isolation on low RPV water level in these analyses, therefore Rosemount 1153 level transmitters are not credited in mitigating high energy line breaks and the radiation effect can be considered negligible since it is assumed to be calibrated out on a periodic basis.