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10 CFR 50.90
10 CFR 50.91(a)(5)

October 6, 2019

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 by the Office of Nuclear Reactor Regulation to support Review of an Emergency License Amendment Request for One Time Extension to the TS 3.8.1 Action A.3 Completion Time for an Inoperable Offsite Source

References:

1. Letter from D. Gudger (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, "Emergency License Amendment Request – One Time Extension to the TS 3.8.1 Action A.3 Completion Time for an Inoperable Offsite Source" dated October 4, 2019
2. Electronic mail from S. Lee (Project Manager, U.S. Nuclear Regulatory Commission) to C. Williams (Exelon), "FitzPatrick request for additional information: Emergency amendment to extend completion time of transformer to 21 days (EPID: L-2019-LLA-0214)," October 4, 2019. 5:01 PM
3. Electronic mail from S. Lee (Project Manager, U.S. Nuclear Regulatory Commission) to C. Williams (Exelon), "FitzPatrick request for additional information: Emergency amendment to extend completion time of transformer to 21 days (EPID: L-2019-LLA-0214)," October 5, 2019, 7:18 AM
4. Electronic mail from S. Lee (Project Manager, U.S. Nuclear Regulatory Commission) to C. Williams (Exelon), "FitzPatrick request for additional information: Emergency amendment to extend completion time of transformer to 21 days (EPID: L-2019-LLA-0214)," October 5, 2019. 9:49 AM

By letter dated October 4, 2019, (Reference 1) Exelon Generation Company, LLC (Exelon) requested a one-time change to the James A. FitzPatrick (JAF) Technical Specifications (TS) under an emergency basis in accordance with 10 CFR 50.91(a)(5). The proposed amendment request would apply the one time change to the Completion Time for TS 3.8.1, required Action A.3 from 7 days to 21 days.

By electronic mail dated October 4 and October 5, 2019 (References 2, 3 and 4), the NRC identified areas where additional information was necessary to complete the review.

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. 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 Christian Williams at 610-765-5729.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 6th day of October 2019.

Respectfully,

David T. Gudger
Acting Director, Licensing
Exelon Generation Company, LLC

Attachment: 1. Request for Additional Information and Exelon Response

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

# ATTACHMENT 1

## Request for Additional Information and Exelon Response

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

**RAI-EICB-1**

*For Surveillance 3.3.5.1.3, associated with Technical Specification (TS) table 3.3.5.1-1, functions 4.e and 5.e., and 3.3.5.1.6, associated with TS 3.3.5.1-1, functions 3.f and 3.g, what historical evidence is there to show that performance is satisfactory? For example, for Surveillance Requirement (SR) 3.3.5.1.3, have the most recent past several surveillances shown that the As-Found condition of the instruments is consistently within the As-Found Tolerance limits, and within the Allowable Value, especially when the Calibration Surveillance falls within the grace period? For SR 3.3.5.1.6, have the results of the Logic System Functional Test been consistently achieving the test acceptance criteria? Is there any other evidence that would indicate that these instrument channels have been performing reliably? Also, what does the LAR mean, exactly, when it says:*

- *The A and B Emergency Diesel Generators and their associated cooling water pumps and power supplies will be protected.*
- *The 4160V emergency buses will be protected.*
- *HPCI and Reactor Core Isolation Cooling (RCIC) will be protected.*
- *Both trains of Residual Heat Removal (RHR) and CSP will be protected.*

**EXELON RESPONSE:**

Surveillance requirement 3.3.5.1.3 is demonstrated as being meet through the completion of ISP-6A, ISP-22-2 and ST-22C. Previous completion review of these activities was conducted. ISP-6A (through Sept 2017) was reviewed and as-found test results were in specification and no adjustment has been required. ISP-22-2 (last 3 performances) was reviewed and as-found test results were in specification and no adjustment has been required. Surveillance Requirement 3.3.5.1.6 is also partially met by ST-22C, ADS Logic System Functional Test. The last performance of ST-22C (November 2018) was completed satisfactorily with no corrective actions.

The intent of protecting systems and components is to provide additional administrative barriers to guard against inadvertently rendering a component or system, which is important to unit risk and nuclear safety, inoperable or unavailable. It is also applicable to those systems and activities that pose a potential risk to generation.

**RAI-EMIB-1**

*SRs 3.5.1.2, 3.5.2.5, 3.5.3.2, 3.6.1.9.1, 3.6.2.3.1, 3.7.1.1 – Explain why it is acceptable to delay these valve position verifications.*

**EXELON RESPONSE:**

The referenced Surveillance Requirements are satisfied by procedures which contain activities other than valve position verifications based on control room panel indication. Procedure ODSO-4, Shift Turnover and Log Keeping, requires a documented verification of all Technical Specification related switch and controller positions once per shift. The completed form is reviewed by a shift SRO and any out-of-normal positions are reviewed by the Shift Manager.

**RAI-EMIB-2**

*SR 3.5.1.7 – Discuss whether or not the core spray and LPCI pumps have shown degradation in past surveillances.*

**EXELON RESPONSE:**

Response for Core Spray: Based on the trending for Core Spray pumps performed per quarterly frequency ST-3PA and ST-3PB, there have been no failures or degrading trends in the past four surveillances. In addition, the last 24-month comprehensive pump test was completed satisfactorily for each pump.

Response for LPCI: Based on the trending for LPCI pumps performed per quarterly frequency ST-2AM and ST-2AL, there have been no failures or degrading trends in the past four surveillances. In addition, the last 24-month comprehensive pump test was completed satisfactorily for each pump.

**RAI-EMIB-3**

*SRs 3.5.1.8 and 3.5.1.9 - Discuss whether or not the HPCI pump has shown degradation in past surveillances.*

**EXELON RESPONSE:**

Based on the trending for HPCI pumps performed per quarterly frequency ST-4N, there have been no failures or degrading trends in the past four surveillances. In addition, the last 24-month comprehensive pump test was completed satisfactorily.

**RAI-EMIB-4**

*SR 3.6.1.3.5 – Discuss whether or not any valves have shown degradation in past surveillances.*

**EXELON RESPONSE:**

ST-4N, HPCI Quick Start, Inservice, and Transient Monitoring; and ST-2AM, RHR Loop B Quarterly Operability Test, in part, satisfy the PCIV SR 3.6.1.3.5. There have been no failures or degrading trends identified in the past four performances.

**RAI-EMIB-5**

*SRs 3.6.1.9.2 and 3.6.2.3.2 – Discuss whether any RHR pump has shown degradation in past surveillances.*

**EXELON RESPONSE:**

Based on the trending for RHR pumps performed per quarterly frequency ST-2AM and ST-2AL, there have been no failures or degrading trends in the past four surveillances. In addition, the last 24-month comprehensive pump test was completed satisfactorily for each pump.

**RAI-EMIB-6**

*SRs 3.8.1.4, 3.8.3.1, 3.8.3.2, 3.8.3.4 – Explain why it is acceptable to delay these SRs.*

**EXELON RESPONSE:**

The referenced Surveillance Requirements are satisfied by procedures which contain activities other than visual observations of EDG support systems (lube oil, fuel oil, and starting air pressure). These activities have the potential to introduce FME into the subject systems or require the operation of the EDG's. EDG fuel oil in both underground fuel oil storage tanks and fuel oil day tanks, as well as lube oil and air starting pressures, are monitored and recorded daily during operator rounds. Operator Rounds are reviewed and approved by the on-shift SRO to ensure any out-of-specification readings are evaluated and corrective actions initiated.

**RAI-SCPB-1**

*Provide specific information for the NRC staff to adequately determine that delaying SRs 3.8.1.4 and 3.8.1.5 would have no adverse impact on the Emergency Diesel Generators (EDGs), if EDG operation becomes necessary during the extended surveillance period.*

**EXELON RESPONSE:**

The referenced Surveillance Requirements are associated with the EDG fuel oil day tanks. EDG fuel oil day tank level is monitored and recorded daily during Operator Rounds. Operator Rounds are reviewed and approved by the on-shift SRO to ensure any out-of-specification readings are evaluated and corrective actions initiated. The potential for water intrusion into the fuel is minimal as evidenced by the fact there have been no failures to meet ST-9AA acceptance criteria during the last 24 months. Additionally, fuel oil would normally only be transferred from the underground fuel oil storage tank to the day tank follow an EDG run which will not be scheduled during the extended surveillance period.

**RAI-EEOB-1**

*In the LAR, Attachment 1, Page 7, the licensee stated: "The preferred resolution is to restore the installed transformer to service based on the age and limited functionality of the replacement transformer."*

*Please explain the term "limited functionality" of the alternative of replacement transformer. List the major differences between the installed transformer and the replacement transformer. Please explain whether the replacement transformer will have an On-Load Tap Changer. If not, whether it will impact the current licensing basis.*

**EXELON RESPONSE:**

The limited functionality refers to the fact that the replacement transformer does not have an On-Load Tap Changer. This is the only major functional difference between the installed transformer and the replacement transformer. The current licensing basis will be reviewed as part of the engineering modification process and updated if required. An agreement between JAF and National Grid will ensure compliance with NERC reliability standard NUC-001-3, Nuclear Plant Interface Requirements (NPIRs), and JAF requirements for grid voltage.

**RAI-EEOB-2**

*Section 8.4.3 of the JAF UFSAR states: "The 345 kV system is capable of supplying all loads on the emergency buses to maintain the plant in the shutdown condition. As the 345 kV backfeed power will be used only during plant outages, a LOCA is not postulated." Please provide an estimate of time which will be required to establish the 345 kV backfeed power, after the plant is tripped.*

**EXELON RESPONSE:**

FitzPatrick has previously implemented the 345kV back-feed configuration to support outage tasks. Based on plant experience, approximately 24 hours would be required to place the station in a 345kV back-feed configuration following a unit trip.

**RAI-STSB-1**

*The Risk Management Actions (RMAs) proposed in pages 10 and 11 of Attachment 5 of the LAR reference two 115kV transmission lines. The second RMA specifically identifies that Nine Mile Point Lines #1 and #4 will be controlled such that maintenance and switching on the lines will be done in emergency situations only. Per the Final Safety Analysis Report as updated in section 8.3.2.4 it describes that the line terminates at Nine Mile Point Nuclear Station Unit 1 before being connected to the National Grid's South Oswego Substation. Does the RMA described above include controlling any work in the switchyard associated with Nine Mile Point Unit 1? If so please describe. If not will controls be put in place in the switchyard associated with Nine Mile Point Unit 1?*

**EXELON RESPONSE:**

The Nine Mile Point Unit 1 115kV switchyard is protected in accordance with OP-AA-108-117, Protected Equipment Program. The switchyard will remain protected until the 115kV transformer 71T-3 is returned to service.