

10 CFR 50.47(b)  
10 CFR 50, Appendix E  
10 CFR 50.54(q)  
10 CFR 50.90  
10 CFR 72.32  
10 CFR 72.44(f)

TMI-21-027

August 30, 2021

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

Three Mile Island Nuclear Station, Unit 1  
Renewed Facility License No. DPR-50  
NRC Docket No. 50-289

Three Mile Island Nuclear Station, Unit 2  
Possession Only License No. DPR-73  
NRC Docket No. 50-320

Subject: Supplement to License Amendment Request – "Proposed Changes to the Three Mile Island Emergency Plan for Independent Spent Fuel Storage Installation Only Emergency Plan and Emergency Action Level Scheme"

Reference: Letter from Michael P. Gallagher, Exelon Generation Company, LLC (Exelon) to U.S. Nuclear Regulatory Commission (NRC) – "Proposed Changes to the Three Mile Island Emergency Plan for Independent Spent Fuel Storage Installation Only Emergency Plan and Emergency Action Level Scheme," dated March 4, 2021 (ML21063A446)

In the Reference letter, Exelon Generation Company, LLC (Exelon) submitted the License Amendment Request (LAR) in support of proposed changes to the Three Mile Island Emergency Plan for the Independent Spent Fuel Storage Installation Only Emergency Plan (IOEP) and Emergency Action Level Scheme.

This supplement to the subject LAR is being submitted to address minor changes that were recently identified. Specifically, there is one minor change made to the proposed LAR and three minor changes/clarifications made to the proposed IOEP. The Enclosure to this letter provides a description of each change, along with associated mark-ups to the affected portion of the LAR and the affected portions of the IOEP.

U.S. Nuclear Regulatory Commission  
Supplement to IOEP License Amendment Request  
Docket Nos. 50-289 and 50-320  
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This submittal has been discussed with the NRC Project Manager for Three Mile Island.

There are no new or revised regulatory commitments contained in this letter.

If you have any questions, please contact Mr. John Hilditch at 267-533-5120.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 30<sup>th</sup> day of August 2021.

Respectfully,



David P. Helker  
Senior Manager - Licensing  
Exelon Generation Company, LLC

Enclosure: Supplement to License Amendment Request - Proposed Changes to the  
Three Mile Island Emergency Plan for Independent Spent Fuel Storage  
Installation Only Emergency Plan (IOEP) and Emergency Action Level  
Scheme

cc: w/ Enclosure

NRC Regional Administrator, Region I  
NRC Project Manager, NMSS/DUWP/RDB - Three Mile Island - Units 1 & 2  
Director, Bureau of Radiation Protection - PA Department of Environmental  
Resources

**Enclosure**

**Supplement to License Amendment Request - Proposed Changes to the Three Mile Island Emergency Plan for Independent Spent Fuel Storage Installation Only Emergency Plan (IOEP) and Emergency Action Level Scheme**

**Introduction**

This enclosure includes supplemental information to address minor changes to the proposed License Amendment Request (LAR) and Independent Spent Fuel Storage Installation Only Emergency Plan (IOEP) that were identified after the submittal of the proposed LAR by Exelon Generation Company, LLC (Exelon) on March 4, 2021. Specifically, there is one minor change to the proposed LAR and three minor changes/clarifications to the proposed IOEP. Each of the minor changes are described below along with page number(s) and the portion(s) of the LAR and/or IOEP that are affected. For clarity, entire sentences or paragraphs from the LAR are provided with deleted text highlighted by ~~strike throughs~~ and inserted text highlighted by ***bolded italics***.

**Change #1: Proposed License Amendment Request (LAR)**

**Affected LAR Sections:** 5.2.2 and 8.0

**LAR Page Numbers:** Attachment 1, Pages 12 and 21

**Description of Change:** The Three Mile Island Unit No. 2 Fire Protection Program Evaluation was revised and takes credit for source term decay. As a result, the dose consequence reduces from 13.5 to 12.4 mrem at the exclusion area boundary. Accordingly, the LAR is revised as shown below. The accident analysis in Section 5.2 is accurate for the current facility conditions. Exelon is aware that TMI-2 Solutions, LLC (TMI-2 Solutions) submitted an application to transition to a facility undergoing radiological decommissioning, i.e., TMI-2 Solutions submittal (ML21057A046), dated February 19, 2021, as supplemented by letter (ML21153A232), dated May 25, 2021. Exelon, in coordination with TMI-2 Solutions, may have to revise this submittal in the future to account for additional changes to the facility conditions.

**5.2.2 TMI-2**

The bounding event for TMI-2 is a fire in the Reactor Building (RB) with the RB Purge System in operation. Per the TMI-2 Fire Protection Program Evaluation Report (Reference 8.20) the dose at the exclusion area boundary is ~~13.5~~ ***12.4*** mrem expressed as a bone dose. Due to the isotopic mix (e.g., negligible amounts of iodine) and the nature of potential releases (i.e., particulate matter), a more restrictive basis (i.e., the critical organ) for comparison was selected for reporting dose for TMI-2 fires.

## 8.0 References

8.20 990-3017, "Three Mile Island Unit No. 2 Fire Protection Program Evaluation," Revision ~~1213~~, dated ~~May 18, 2018~~ **February 2, 2020**

### **Change #2: Proposed Independent Spent Fuel Storage Installation Only Emergency Plan (IOEP)**

**Affected IOEP Section:** 5.1

**LAR Page Number:** Attachment 2, Page 19

**Description of Change:** Additional details have been added to clarify and describe the means by which the onsite individuals and visitors at the TMI site will be notified during an emergency. Accordingly, the proposed IOEP section is revised as shown below.

#### **5.1 NOTIFICATION AND MOBILIZATION OF TMI EMERGENCY RESPONSE PERSONNEL**

The EIPs provide direction for alerting and notifying ONSITE EMERGENCY RESPONSE PERSONNEL of the initial CLASSIFICATION or any escalation of an emergency by verbal announcements over ***the plant page system and*** portable radios, ***and through an electronic notification system capable of notifying site personnel by multiple means of communications (e.g., cell phone, email, text, landline, etc.).*** Each emergency CLASSIFICATION may result in augmentation personnel being notified to respond. EIPs provide direction for augmentation personnel being notified.

**Change #3: Proposed Independent Spent Fuel Storage Installation Only  
Emergency Plan (IOEP)**

**Affected IOEP Section:** 5.3

**LAR Page Number:** Attachment 2, Page 19

**Description of Change:** Additional details have been added to clarify additional information that may be requested by the State or Local counties, consistent with what is described in the TMI PDEP. Accordingly, the proposed IOEP section is revised as shown below.

**5.3 EMERGENCY MESSAGES**

Notification of an emergency is provided verbally to the State and LOCAL GOVERNMENT providing them with applicable information utilizing an established message format that describes the accident status. The content of the initial notification and follow-up message form has been established in conjunction with the Commonwealth of Pennsylvania and includes the date and time of the incident, the class of emergency, and the EAL. Appropriate identification of the caller and time of the notification are also provided.

Follow-up messages *and offsite notifications* will be provided as directed by the EPIPs. *The Pennsylvania Emergency Management Agency or local counties may request additional information on whether a release has occurred, is occurring, or is anticipated to occur; actual or projected dose rates at the site boundary; and whether or not offsite assistance is needed.*

**Change #4: Proposed Independent Spent Fuel Storage Installation Only  
Emergency Plan (IOEP)**

**Affected IOEP Section:** 5.5

**LAR Page Number:** Attachment 2, Page 20

**Description of Change:** Additional details have been added to clarify that a coordinated communications link for medical support exists. Accordingly, the proposed IOEP section is revised as shown below.

**5.5 SUPPORT ORGANIZATIONS**

Medical, local law enforcement agency, and firefighting support services are notified for assistance via the public 9-1-1 system, using the commercial telephone, as the situation dictates. Cellular or satellite phones may be used as the back-up means of communication. *Site specific emergency procedures provide direction for contacting medical support directly.*