

TM1-22-019

May 6, 2022

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 Nos. 50-289 and 72-077

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

Subject: Response to Request for Additional Information
License Amendment Request – Revise Three Mile Island Nuclear Station
License in Support of Independent Spent Fuel Storage Installation (ISFSI)
Only Security Plan

- References:
- 1) Letter from Michael P. Gallagher (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission – *"License Amendment Request - Revise Three Mile Island Nuclear Station License in Support of Independent Spent Fuel Storage Installation (ISFSI) Only Security Plan,"* dated April 29, 2021 (ML21145A183)
 - 2) Electronic Mail Request from Amy Snyder (U.S. Nuclear Regulatory Commission) to Craig W. Smith (Constellation Energy Generation, LLC) – *"Three Mile Island, Unit 1 - Request for Additional Information (EPID No. L-2021-SPR-0004),"* dated April 19, 2022 (ML22110A021)

By letter dated April 29, 2021 (Reference 1), Exelon Generation Company, LLC (now Constellation Energy Generation, LLC (CEG)) submitted a License Amendment Request (LAR) requesting changes to the Renewed Facility License DPR-50 for Three Mile Island Nuclear Station, Unit 1 (TMI-1) and approval of the proposed TMI-1 Independent Spent Fuel Storage Installation (ISFSI) Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan (ISFSI Security Plan) and Alternative Measures.

TMI, Unit 2, which is owned by TMI-2 Solutions, LLC, has a possession-only license and is currently maintained in accordance with the NRC-approved SAFSTOR condition (i.e., method in which a nuclear facility is placed and maintained in a condition that allows it to be safely stored and subsequently de-contaminated) known as Post-Defueling Monitored Storage. TMI-2 Solutions, LLC, has established commercial arrangements with CEG to provide security services for TMI, Unit 2.

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Subsequently, in electronic mail request dated April 19, 2022 (Reference 2), the U.S. Nuclear Regulatory Commission (NRC) issued a request for additional clarifying information in support of the Reference 1 LAR in order to complete the technical review of the application. On April 11, 2022, discussions between NRC and CEG representatives were held via teleconference to discuss the need for the additional clarifying information. The NRC requested that CEG respond to the request under oath and affirmation within 10 calendar days of the electronic mail request. However, on April 28, 2022, additional discussions were held with NRC representatives via teleconference in which it was agreed that a response would be provided by May 6, 2022.

The Attachment to this letter provides the response to the questions identified in the Reference 2 electronic mail request.

CEG has reviewed the information supporting a finding of No Significant Hazards Consideration and the Environmental Consideration provided to the NRC in the Reference 1 submittal. The additional clarifying information provided in this response to the NRC request for additional information does not impact the conclusion that the proposed license amendment does not involve a significant hazards consideration. The additional information provided also does not impact the conclusion that there is no need for an environmental assessment to be prepared in support of the proposed amendment.

There are no regulatory commitments contained in this submittal.

In accordance with 10 CFR 50.91, "Notice for public comment; State consultation," paragraph (b), CEG is notifying the Commonwealth of Pennsylvania by transmitting a copy of this submittal to the designated State Official.

If you have any questions concerning this submittal, please contact Mr. Craig W. Smith at (717) 948-8776.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 6th day of May 2022.

Respectfully,



David P. Helker
Sr. Manager, Licensing
Constellation Energy Generation, LLC

Attachment: Response to Request for Additional Information

cc: w/ Attachment

Regional Administrator - NRC Region I
Project Manager, NMSS - Three Mile Island, Unit 1
Decommissioning, ISFSI and Reactor Health Physics Branch - NRC Region I
Director, Bureau of Radiation Protection - PA Department of Environmental
Protection

ATTACHMENT

Response to Request for Additional Information

Introduction

By letter dated April 29, 2021, Exelon Generation Company, LLC (now Constellation Energy Generation, LLC (CEG)) submitted a License Amendment Request (LAR) requesting changes to the Renewed Facility License DPR-50 for Three Mile Island Nuclear Station, Unit 1 (TMI-1) and approval of the proposed TMI-1 Independent Spent Fuel Storage Installation (ISFSI) Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan (ISFSI Security Plan) and Alternative Measures.

TMI, Unit 2, which is owned by TMI-2 Solutions, LLC, has a possession-only license and is currently maintained in accordance with the NRC-approved SAFSTOR condition (i.e., method in which a nuclear facility is placed and maintained in a condition that allows it to be safely stored and subsequently de-contaminated) known as Post-Defueling Monitored Storage. TMI-2 Solutions, LLC, contracts with CEG to provide security services for TMI, Unit 2.

Subsequently, in electronic mail request dated April 19, 2022, the U.S. Nuclear Regulatory Commission (NRC) issued a request for additional clarifying information in support of the April 29, 2021, LAR in order to complete the technical review of the application. On April 11, 2022, discussions between NRC and CEG representatives were held via teleconference to discuss the need for the additional clarifying information. The NRC requested that CEG respond to the request under oath and affirmation within 10 calendar days of the electronic mail request. However, on April 28, 2022, additional discussions were held with NRC representatives via teleconference in which it was agreed that a response would be provided by May 6, 2022.

Background

Pursuant to License Condition 2.c.(3) TMI-1 currently maintains in effect all provisions of the NRC-approved physical security, training and qualification, and safeguards contingency plans. However, in support of the proposed ISFSI Security Plan LAR submitted by letter dated April 29, 2021, CEG is providing additional clarification with regard to the security plans that will be instituted once the TMI-1 spent fuel pools are emptied and material is transferred to the ISFSI.

Once implemented, TMI-1 will be maintaining the following security-related plans:

- Three Mile Island Nuclear Station Independent Spent Fuel Storage Installation Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan

This is the ISFSI Security Plan and will address the protection of material on site that is licensed by the 10 CFR 50 TMI-1 Renewed Facility License (RFL). The material subject to the requirements of 10 CFR 37, "Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material," and 10 CFR 73.67, "Physical Protection of Special Nuclear Material of Moderate and Low Strategic Significance," are not addressed in this Plan. This document, including appendices, satisfies the security regulatory requirements as set forth in 10 CFR 72, Subpart K, for power reactor sites that have relocated all fuel assemblies to the ISFSI.

- Three Mile Island Part 37 Protection of Category 1 and Category 2 Quantities of Radioactive Material and 73.67 Protection of Special Nuclear Material of Moderate and Low Strategic Significance Security Plan

This is the Materials Security Plan that will provide a description of how the requirements of 10 CFR 37, "Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material," and 10 CFR 73.67, "Physical Protection of Special Nuclear Material of Moderate and Low Strategic Significance," will be implemented at TMI-1. CEG will also have a commercial arrangement in place to secure materials from TMI-2 under this plan, but this arrangement is not necessary for TMI-1 to meet its regulatory obligations. This Plan will be implemented coincident with the implementation of the proposed ISFSI Security Plan.

Accordingly, this attachment provides the CEG response to the questions identified in the April 19, 2022, electronic mail request (ML22110A021). The specific questions are reiterated below followed by the CEG response.

RAI-1

On page 2 of 8 of Attachment 1 of the April 29, 2021, LAR, it states:

"Upon approval and implementation of the proposed TMI-1 ISFSI Security Plan, Exelon will no longer provide Security for TMI-2."

Please clarify whether any of the TMI-1 security plans will provide security for TMI-2. If the plans will provide security for TMI-2, when will they go into effect, under what circumstances, and what is the scope of the security services that will be provided?

Response

As noted above in the Background section, TMI will be maintaining two (2) security-related plans (i.e., ISFSI Security Plan and Materials Security Plan) following approval of the ISFSI-only Security Plan LAR submitted on April 29, 2021 (ML21145A183). The ISFSI Security Plan pertains to the protection of material licensed under the TMI-1 RFL, and the Materials Security Plan is related to materials control subject to the requirements of 10 CFR Parts 37 and 73.67 for TMI-1. CEG will have a commercial arrangement in place with the TMI-2 licensee to also secure materials from TMI-2 under this plan, but this arrangement is not necessary for TMI-1 to meet its regulatory obligations. However, CEG is not the licensee for TMI-2 as the facility is owned and controlled by a different entity, TMI-2 Solutions, LLC. Therefore, CEG considers that it would be more appropriate for questions related to TMI-2's compliance with the NRC's security requirements be directed and answered by the TMI-2 licensee.

RAI-2

Clarify whether the TMI-1 Physical Security plans in the April 29, 2021, TMI-1 Physical Security License Amendment Request (LAR) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21145A183), if approved by the NRC, will provide for the protection of the TMI-2 Part 37 and 73.67 material.

Response

Refer to the response provided for RAI-1 above. The TMI-2 licensee is responsible for establishing compliance with applicable NRC requirements.

RAI-3

On page 3 of 8 of your April 29, 2021, License Amendment Request, TMI-1 states that the protection of material subject to the requirements of Part 37 and 10 CFR 73.67 stored on site will be addressed in separate plans.

- a. Please clarify what is meant by the phrase "stored on site." Is this meant to reference the TMI-1 site, the TMI-2 site, or both sites?*

Response

The phrase "stored on site" is meant to reference both sites (TMI-1 and TMI-2). As noted above, CEG will have a commercial arrangement in place with the TMI-2 licensee to also secure materials from TMI-2 under this plan, but this arrangement is not necessary for TMI-1 to meet its regulatory obligations.

- b. Please identify which of TMI-1's physical security plans, if any, will provide security for TMI-2. Please identify which of TMI-1's security plans, if any, will not provide security for TMI-2.*

Response

Refer to the response provided for RAI-1 above. The TMI-2 licensee is responsible for establishing compliance with applicable NRC requirements.

- c. Please clarify which of TMI-1's physical security plans will include the protection of 73.67 material. Additionally, clarify whether this will include protection of 73.67 material at the TMI-2 site.*

Response

Refer to the response provided for RAI-1 above. The TMI-2 licensee is responsible for establishing compliance with applicable NRC requirements.

RAI-4

Constellation Energy Generation, LLC proposes the following license condition:

Constellation Energy, LLC shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans including amendments made pursuant to 10 CFR 72.212(b)(9) and the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans¹, submitted by letter dated April 29, 2021, (ADAMS Accession No. ML21145A183), is entitled: "Three Mile Island Nuclear Station Independent Spent Fuel Storage Installation Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan, Revision 0." The set contains Safeguards Information protected under 10 CFR 73.21.

Because TMI-1 has nuclear material that is regulated under 10 CFR 73.67, a tie to the license is appropriate. If some or all of TMI-1's Physical Security Plans, will cover physical security for both TMI-1 and TMI-2, then the proposed license condition will need to be revised to make clear that TMI-1 will protect the Part 37 and 10 CFR 73.67 material at both TMI-1 and TMI-2. Please review the following draft license condition below and let the NRC know within 10 calendar days if TMI-1 agrees with this proposed license condition:

TMI-1
License Condition 2.C[c].(3)

*"Constellation Energy **Generation**, LLC shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans including amendments made pursuant to 10 CFR 72.212(b)(9) and the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans¹, submitted by letter dated April 29, 2021, (ADAMS Accession No. ML21145A183), is **titled**: "Three Mile Island Nuclear Station Independent Spent Fuel Storage Installation Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan, Revision 0." **This set of plans contains Safeguards Information protected under 10 CFR 73.21. Also, TMI-1 shall fully implement and maintain in effect all provisions of the TMI-Station Part 37 Plans which address the protection of Part 37 and Section 10 CFR 73.67 material for both TMI-1 and TMI-2. The set and Plans identified above contains Safeguards Information protected under 10 CFR 73.21."***

(Footnote) 1:
The Training and Qualification Plan, and Safeguards Contingency Plan are Appendices to the Security Plan.

Response

The current License Condition 2.c.(3) along with the footnote specifies the following:

(3) Physical Protection

Constellation Energy Generation, LLC shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822), and the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans¹, submitted by letter dated May 17, 2006, is entitled: "Three Mile Island Nuclear Station Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan, Revision 3." The set contains Safeguards Information protected under 10 CFR 73.21.

¹ *The Training and Qualification Plan and Safeguards Contingency Plan are Appendices to the Security Plan.*

CEG has reviewed the changes to License Condition 2.c.(3) proposed by the NRC as shown in the above mark-up. CEG opposes a proposed license condition for TMI-1 that would reference/include TMI-2. CEG is not the licensee for TMI-2 as the facility is owned and controlled by a different entity and, therefore, CEG cannot be obligated through the TMI-2 license to ensure that TMI-2 meets its own independent regulatory obligations. Therefore, CEG offers the proposed wording for consideration by the NRC as highlighted below.

(3) Physical Protection

Constellation Energy Generation, LLC shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans including amendments made pursuant to **10 CFR 72.212(b)(9)** ~~provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822)~~, and the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans¹, submitted by letter dated **April 29, 2021**, is ~~entitled:~~ **entitled: "Three Mile Island Nuclear Station Independent Spent Fuel Storage Installation Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan, Revision 0."** ~~This~~ **The set of plans** contains Safeguards Information protected under 10 CFR 73.21.

¹ The Training and Qualification Plan and Safeguards Contingency Plan are Appendices to the Security Plan.