

10 CFR 50.90

TM1-22-013

March 28, 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

Subject: Supplemental Information Supporting License Amendment Request - Proposed Revision to License Conditions and Permanently Defueled Technical Specifications for Permanent Removal of Irradiated Fuel from the Spent Fuel Pool (ISFSI-Only Technical Specifications)

Reference: Letter from Michael P. Gallagher (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission - "Proposed Revision to License Conditions and Permanently Defueled Technical Specifications for Permanent Removal of Irradiated Fuel from the Spent Fuel Pool (ISFSI-Only Technical Specifications)," dated December 16, 2020 (ML20351A451)

By letter dated December 16, 2020 (Reference), Exelon Generation Company, LLC (now Constellation Energy Generation, LLC) submitted a License Amendment Request (LAR) that involved changes to Renewed Facility License (RFL) license conditions and the Permanently Defueled Technical Specifications (PDTs) to support permanent removal of irradiated fuel from the Spent Fuel Pools (SFPs) and creation of the Independent Spent Fuel Storage Installation (ISFSI) only Technical Specifications (i.e., ISFSI-only TS).

During recent discussions between U.S. Nuclear Regulatory Commission (NRC) and Constellation Energy Generation, LLC (CEG) representatives concerning the subject LAR, the NRC questioned whether certain reporting requirements need to be retained in the TS pursuant to the requirements of 10 CFR 50.36a(a). In the Reference submittal, certain reporting requirements described in Section 6 of the TS were to be removed and the requirements relocated to another licensee administratively controlled document, i.e., Defueled Safety Analysis Report (DSAR). Specifically, the TS reporting requirement description for the "Annual Radiological Effluent Release Report" was to be removed and the applicable requirements relocated to the DSAR, which may be considered contrary to requirements in 10 CFR 50.36a(a), which stipulates that a licensee shall submit the following:

- (a) *To keep releases of radioactive materials to unrestricted areas during normal conditions, including expected occurrences, as low as is reasonably achievable, each licensee of a nuclear power reactor and each applicant for a design certification or a manufacturing license will include technical specifications that, in addition to requiring compliance with applicable provisions of § 20.1301 of this chapter, require that:*
- (2) *...submit a report to the Commission annually that specifies the quantity of each of the principal radionuclides released to unrestricted areas in liquid and in gaseous effluents during the previous 12 months, including any other information as may be required by the Commission to estimate maximum potential annual radiation doses to the public resulting from effluent releases....*

CEG acknowledges this issue and has decided to supplement the Reference submittal to retain the specific reporting requirement in the TS. Accordingly, the reporting requirement for the "Annual Radiological Effluent Release Report," will be retained in the TS and the requirements will not be removed/relocated. However, the specific TS reference numbering for this report is being revised to conform with the proposed ISFSI-only TS formatting.

Additionally, and in conjunction with this supplement, CEG is proposing to revise the terminology for the title of the "Updated Final Safety Analysis Report (UFSAR)" in the RFL license condition noted below to read "Defueled Safety Analysis Report (DSAR)." The title of this document has been referenced in other licensing-related submittals and documents in various ways. There is no change in the actual content of the document, and this is a title change only. Changing the title of this document is considered administrative/editorial in nature and is intended to ensure consistency with how this document will be referenced.

2. *Renewed Facility License No. DPR-50 is hereby issued to Constellation Energy Generation, LLC, to read as follows:*
- a. *This renewed license applies to the Three Mile Island Nuclear Station, Unit 1, a pressurized water reactor and associated equipment (the facility), owned by Constellation Energy Generation, LLC. The facility is located in Dauphin County, Pennsylvania, and is described in the "~~Updated Final Safety Analysis Report (UFSAR)~~" "Defueled Safety Analysis Report (DSAR)" as supplemented and amended and the Environmental Report as supplemented and amended.*

The Attachment to this letter provides the affected updated RFL and TS pages to reflect these changes proposed in this supplement.

CEG has reviewed the information supporting a finding of No Significant Hazards Consideration and the Environmental Consideration provided to the NRC in the Reference letter. The additional information provided in this LAR supplement does not impact the conclusion that the proposed license amendment does not involve a significant hazards

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consideration. The additional information 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 28th day of March 2022.

Respectfully,



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

Attachment: Updated RFL and TS Mark-up Pages in Support of TMI-1 ISFSI-only License Amendment Request

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 Resources

ATTACHMENT

Updated RFL and TS Mark-up Pages in Support of TMI-1 ISFSI-only
License Amendment Request

Renewed Facility License Page

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Technical Specifications Pages

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i. The receipt, possession, and use of source, byproduct and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40, and 70, including 10 CFR Section 30.33, 40.32, 70.23 and 70.31; and

j. ~~Actions have been identified and have been or will be taken with respect to (1) managing the effects of aging during the period of extended operation on the functionality of structures and components that have been identified to require review under 10 CFR 54.21(a)(1); and (2) time limited aging analyses that have been identified to require review under 10 CFR 54.21(c), such that there is reasonable assurance that the activities authorized by the renewed operating license will continue to be conducted in accordance with the current licensing basis, as defined in 10 CFR 54.3, for the facility, and that any changes made to the facility's current licensing basis in order to comply with 10 CFR 54.29(a) are in accordance with the Act and the Commission's regulations.~~ DELETED

2. Renewed Facility License No. DPR-50 is hereby issued to Constellation Energy Generation, LLC to read as follows: |

a. This renewed license applies to the Three Mile Island Nuclear Station, Unit 1, a pressurized water reactor and associated equipment (the facility), owned by Constellation Energy Generation, LLC. The facility is located in Dauphin County, Pennsylvania, and is described in the ~~"Updated Final Safety Analysis Report (UFSAR)"~~ as supplemented and amended and the Environmental Report as supplemented and amended. |

"Defueled Safety Analysis Report (DSAR)"

b. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:

(1) Constellation Energy Generation, LLC, pursuant to Section 104b of the Act and 10 CFR Part 50, "Licensing of Production and Utilization Facilities," to possess and use the facility as required for fuel storage in accordance with the procedures and limitations set forth in this renewed license; |

(2) Constellation Energy Generation, LLC, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess at any time any byproduct, source and special nuclear material used previously as reactor fuel, sealed neutron sources used previously for reactor startup, as fission detectors, and sealed sources for reactor instrumentation and to possess and use at any time any byproduct, source and special nuclear material as sealed sources for radiation monitoring equipment calibration in amounts as required; |

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6.91 REPORTING REQUIREMENTS

In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following identified reports shall be submitted to the Administrator of the NRC Region 1 Office unless otherwise noted.

6.9.1 Routine Reports

~~A. Annual Reports. Annual reports covering the activities of the unit as described below during the previous calendar year shall be submitted prior to March 1 of each year. (A single submittal may be made for the station. The submittal should combine those sections that are common to both units at the station.)~~

~~1. The following information on aircraft movements at the Harrisburg International Airport:~~

~~a. The total number of aircraft's movements (takeoffs and landings) at the Harrisburg International Airport for the previous twelve-month period.~~

~~b. The total number of movements of aircraft larger than 200,000 pounds at the Harrisburg International Airport for the previous twelve-month period, broken down into scheduled and non-scheduled (including military) takeoffs and landings, based on a current estimate provided by the airport manager or his designee.~~

6.9.2 ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

~~6.9.2.1 The Annual Radiological Environmental Operating Report covering the facility during the previous calendar year shall be submitted prior to May 1 of each year.~~

~~The Report shall include summaries, interpretations, and an analysis of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in: (1) the ODCM; and, (2) Sections IV.B.2, IV.B.3, and IV.C of Appendix I to 10 CFR Part 50.~~

~~Note: A single submittal may be made for the station.~~

~~6.9.3.4~~ The Annual Radioactive Effluent Release Report covering the facility during the previous calendar year shall be submitted prior to May 1 of each year.

The Report shall include a summary of the quantities of radioactive liquid and gaseous effluent and solid waste released from the unit. The material provided shall be: (1) consistent with the objectives outlined in the ODCM and Process Control Program (PCP); and, (2) in conformance with 10 CFR 50.36(a) and Section IV.B.1 of Appendix I to 10 CFR Part 50.

Note: A single submittal may be made for the station. The submittal should combine those sections that are common to both units at the station.

~~6.10~~ RECORD RETENTION

~~6.10.1~~ Records shall be retained as described by the Decommissioning Quality Assurance Program.

~~6.11~~ DELETED

~~6.422~~ HIGH RADIATION AREA

Pursuant to 10 CFR Part 20, paragraph 20.1601(c), in lieu of the requirements of paragraph 20.1601(a) and 20.1601(b) of 10 CFR Part 20:

- ~~6.422.1~~ Access to each high radiation area, as defined in 10 CFR 20, in which an individual could receive a deep dose equivalent > 0.1 rem in one hour (at 30 centimeters from the radiation source or from any surface penetrated by the radiation) shall be controlled as described below to prevent unauthorized entry.
- a. Each area shall be barricaded and conspicuously posted as a high radiation area. Such barricades may be opened as necessary to permit entry or exit of personnel or equipment.
 - b. Entrance shall be controlled by requiring issuance of a Radiation Work Permit (RWP) or equivalent that includes specification of radiation dose rate in the immediate work area(s) and other appropriate radiation protection equipment and measures.
 - c. Individuals qualified in radiation protection procedures or personnel continuously escorted by such individuals may, for the performance of their assigned duties in high radiation areas, be exempt from the preceding requirements for issuance of an RWP or equivalent provided they are otherwise following plant radiation protection procedures for entry into, exit from, and work in such high radiation areas.

- d. Each individual or group of individuals permitted to enter such areas shall possess, or be accompanied by, one or more of the following:
 1. A radiation monitoring device that continuously indicates the radiation dose rate in the area.
 2. A radiation monitoring device that continuously integrates the radiation dose rate in the area and alarms when a preset setpoint is reached. Entry into high radiation areas with this monitoring device may be made after the dose rate in the area has been determined and personnel have been made knowledgeable of it.
 3. A radiation monitoring device that continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area.
 4. An individual qualified in radiation protection procedures equipped with a radiation dose rate monitoring device. This individual shall be responsible for providing positive radiation protection control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by radiation protection supervision.

6.422.2 In addition to the requirements of Specification 6.12.1, high radiation areas in which an individual could receive a deep dose equivalent > 1.0 rem in one hour (at 30 centimeters from the radiation source or from any surface penetrated by the radiation), but less than 500 rads/hour (at 1 meter from the radiation source or from any surface penetrated by the radiation) shall be provided with a locked or continuously guarded door, or gate, or equivalent to prevent unauthorized entry.

- a. The keys to such locked doors or gates, or equivalent, shall be administratively controlled in accordance with a program approved by the radiation protection manager.
- b. Doors and gates, or equivalent, shall remain locked except during periods of access by personnel under an approved RWP, or equivalent, to ensure individuals are informed of the dose rate in the immediate work areas prior to entry.
- c. Individual high radiation areas in which an individual could receive a deep dose equivalent > 1.0 rem in one hour (at 30 centimeters from the radiation source or from any surface penetrated by the radiation), accessible to personnel, that are located within larger areas where no enclosure exists to enable locking, or that are not continuously guarded, and where no lockable enclosure can be reasonably constructed around the individual area require both of the following access controls:
 1. Each area shall be barricaded and conspicuously posted.
 2. A flashing light shall be activated as a warning device.