



HITACHI

GE Hitachi Nuclear Energy

Scott P. Murray

Manager, Facility Licensing

3901 Castle Hayne Road
P.O. Box 780
Wilmington, NC 28402
USA

T (910) 819-5950

F (910) 362-5950

scott.murray@ge.com

M200091

June 30, 2020

Director, Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001
Attn: Document Control Desk

Subject: GEH Morris Operation (MO) License Renewal Application

References:

- (1) NRC License SNM-2500, Docket 72-1
- (2) GEH/NRC Pre-Application Meeting, 11/7/18
- (3) GEH/NRC Pre-Application Meeting Telecom, 11/12/19
- (4) Letter S.P. Murray (GEH) to NRC NMSS, Request to Extend Due Date for Submitting GEH MO License Renewal Application, 4/30/20
- (5) Letter J. McKirgan (NRC) to S.P. Murray, Issuance of Exemption from 10 CFR 72.42(c) for the Timing of the GEH MO License Renewal Submittal.

GE Hitachi Nuclear Energy Americas LLC (GEH) hereby submits an application to renew Special Nuclear Material License SNM-2500 for the GEH Morris Operation (MO) Independent Spent Fuel Storage Installation (ISFSI), in Morris, Illinois pursuant to 10 CFR 72.42 and the NRC approved renewal timing exemption (Reference 5).

Included with this application are a revised Consolidated Safety Analysis Report (CSAR), revised CSAR "A" Appendices and a Supplement to Applicant's Environmental Report. The CSAR "B" Appendices that were submitted during the last license renewal in May 2000 (ML080170476) remain unchanged and are incorporated by reference. As described later in this letter, a revised MO Quality Assurance Plan was previously submitted and approved. The Security Plan and Emergency Plan previously submitted remain unchanged. The license Technical Specifications for Safety approved in Amendment 14 remain unchanged.

As discussed during the pre-application meetings (References 2 and 3), GEH is requesting renewal of the site-specific license, SNM-2500, for the ISFSI. The request is to extend the NRC authorization for operation of the ISFSI and allow GEH to continue to maintain safe storage of the spent fuel until it can be transported offsite. The current license will expire on May 31, 2022. The renewal request is to extend the license for 20 years beyond the current term through May 2042.

By contract, the US Department of Energy (DOE) has ultimate responsibility for the permanent disposition of the spent fuel stored at the ISFSI. Interim storage for the spent fuel is necessary because there is no operational DOE facility for permanent disposal or storage for irradiated

spent nuclear fuel. Extending operation of the ISFSI is necessary since GEH must be able to store spent fuel in a safe manner pending disposition in a Federal repository.

On December 21, 2004, the NRC renewed the current license and incorporated amendments through Amendment 12, which modified the license to authorize storage of only the spent fuel currently in inventory. There are no plans to receive additional spent fuel or replace any currently in inventory.

In 2007, NRC approved Amendment 13 to transfer the GE license to GEH. The newly formed entity, GEH, acquired ownership of the Morris Operation ISFSI and assumed responsibility for the operation and maintenance of the facility.

In June 2013, GEH submitted a license amendment request to modify the Technical Specifications for Safety regarding submittal of annual environmental reports in accordance with regulatory requirements along with miscellaneous editorial changes (ML15106A008). NRC approved changes to the Technical Specifications and issued Amendment 14 to the license on April 16, 2015 (ML15106A020).

In February 2017, GEH submitted a license amendment request proposing minor clarifying administrative changes to the license. The proposed changes added descriptions of authorized materials and physical forms currently onsite and described in the CSAR. NRC approved the changes and issued Amendment 15 to the license on June 29, 2017 (ML17093A936).

The GEH MO CSAR contains a detailed description of the facility, site characteristics and includes technical information and safety assessments of the principle structures, systems and components of the installation. The CSAR also contains a summary description of the programs and activities relied upon to manage the effects of aging and an evaluation of the time limited aging analysis for the renewal period (CSAR Appendix A.8). The CSAR provides reasonable assurance of protection of the health and safety of the public and operating personnel. A revised CSAR is provided as Attachment 1 to this letter and revised CSAR "A" appendices are provided as Attachment 2 to this letter.

In accordance with 10 CFR 72.24 and 10 CFR Part 72, Subpart G, a GEH MO Quality Assurance Plan (QAP) (NEDE-31559) has been prepared, submitted, and approved by NRC. NEDE-31559, Revision 4, was submitted on January 23, 2020 (ML20023A840) and was approved for use on April 15, 2020 (ML20094G482). The GEH MO QAP complies with 10 CFR Part 72, 10 CFR Part 21, and 10 CFR Part 71 in support of the SNM-2500 licensed activities (Docket 72-1) and radioactive material packaging and transportation activities (Docket 71-004) respectively.

A GEH MO Physical Security Plan has been prepared and submitted that satisfies the requirements of 10 CFR Part 72, Subpart H. The Physical Security Plan, Revision 9 was submitted on March 9, 2017 with changes that did not decrease the safeguards effectiveness of the plan. The physical security plan describes the design criteria and security measures for the physical protection of the facility and protection against unauthorized access. The requirements of 10 CFR 73, Appendix C for contingency planning are addressed in Section 9.0 of the physical security plan.

In accordance with 10 CFR 72.30, an updated GEH MO Decommissioning Funding Plan (DFP) was revised and submitted on March 6, 2020 (ML20066K270 & ML20066K274). The DFP provides a site-specific decommissioning cost estimate and provides the method of assuring funds to support decommissioning the facility remain available. The DFP includes information on general decommissioning criteria, decommissioning cost estimate assumptions and the technical approach to reduce the level of radioactivity in the facility to residual levels suitable for unrestricted release to allow license termination in accordance with 10 CFR 72.54.

A GEH MO Emergency Plan has been prepared that satisfies the requirements of 10 CFR Part 72.32. An emergency plan document revision summary report for Revision 5 was submitted on May 28, 2019 (ML19148A696 & ML19148A697). The changes were reviewed in accordance with the provisions of 10 CFR 72.48 and determined not to decrease the effectiveness of the plan. The emergency plan describes the emergency response organization, types of postulated accidents and processes for assessments, response, mitigation, training, periodic exercises and notification of offsite agencies.

A GEH MO Supplement to Applicant's Environmental Report was prepared in December 2019 that satisfies the requirements of 10 CFR Part 72.34. The supplement provides updated local environment information and potential environmental impacts associated with continued operations of the facility. The supplement is provided as Attachment 3 to this letter.

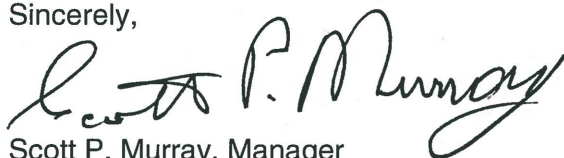
GEH MO maintains an acceptable material control and accountability program pursuant to 10 CFR 72.72, 72.76, 72.78 and to ensure the SNM currently at the facility is adequately controlled and reported.

GEH recommends retaining the same license conditions as contained in the current license (Amendment 15) as follows:

- Conditions 6, 7 and 8 regarding the types of licensed material, chemical or physical forms and maximum amounts that may be possessed.
- Conditions 9 and 10 regarding authorized use, possession, storage, transfer and location.
- Condition 11 regarding unirradiated and natural uranium.
- Condition 12 regarding the Radiological Emergency Plan and implementing procedures.
- Condition 13 regarding the Technical Specifications revised through Amendment 14.
- Condition 14 should be revised to reference the current Physical Security Plan dated February 16, 2017.
- Condition 15 regarding the effective date of the license.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge. Executed on June 30, 2020. Please contact me at (910) 819-5950 if you have questions.

Sincerely,



Scott P. Murray, Manager
Facility Licensing

Cc:

K. Banovac, NRC DFM
SPM 20-024

Attachments:

1. Updated GEH MO CSAR Chapters 1-11, June 2020
2. Updated CSAR "A" appendices 1-17, June 2020
3. GEH MO Supplement to Applicant's Environmental Report, December 2019