



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

June 9, 2017

Mr. Jerald G. Head
Senior Vice President, Regulatory Affairs
General Electric – Hitachi
Nuclear Energy Americas, LLC
P.O. Box 780, MC A-10
Wilmington, NC. 28402

SUBJECT: SAFETY EVALUATION REPORT FOR THE GENERAL ELECTRIC HITACHI
NUCLEAR ENERGY, TOPICAL REPORT NEDE-31559, "GENERAL ELECTRIC
HITACHI NUCLEAR ENERGY QUALITY ASSURANCE PLAN MORRIS
OPERATION" (CAC NO. L25119)

Dear Mr. Head:

By letter dated October 9, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15287A286), as supplemented on May 13, 2016 (ADAMS Accession No. ML16134A250), and October 14, 2016 (ADAMS Accession No. ML16288A021), General Electric Hitachi (GEH) Nuclear Energy requested a revision to the (GEH) Nuclear Energy, Morris Operation Quality Assurance Plan (QAP).

Specifically, GEH submitted a proposed revision to Topical Report NEDE-31559, "GEH Nuclear Energy Quality Assurance Plan – Morris Operation," Revision 3. The proposed revision reflects minor editorial changes, administrative improvements, an updated organization chart and responsibilities, and directed several quality assurance (QA) program areas such as design control, control of purchased material, equipment and services, corrective action program, and audits to another Nuclear Regulatory Commission approved GEH QA document, topical report NEDO-11209A, Revision 12.

As a result of our review of the proposed revision and its supplements, the staff prepared a safety evaluation report (SER) to document the independent verification against the requirements of Title 10 of the *Code of Federal Regulation* (10 CFR) Part 72. The enclosed SER contains information regarding the scope of the staff's review and our conclusions for the amended QAP, topical report NEDE-31559, Revision 3. The staff found that the revised QAP meets the requirements of 10 CFR Part 72, subpart G, "Quality Assurance."

If you have any questions regarding this approval of the QAP, please contact me at (301) 415-7399 or Marlene Davis at (301) 415-7447.

Sincerely,

/RA/

Patricia A. Silva, Chief
Inspections and Operations Branch
Division of Spent Fuel Management
Office of Nuclear Material Safety
and Safeguards

Docket No. 72-01
CAC No. L25119

Enclosure:
Safety Evaluation Report

SAFETY EVALUATION REPORT FOR THE GENERAL ELECTRIC HITACHI NUCLEAR ENERGY, TOPICAL REPORT NEDE-31559, "GENERAL ELECTRIC HITACHI NUCLEAR ENERGY QUALITY ASSURANCE PLAN MORRIS OPERATION" (CAC NO. L25119)
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION REPORT
Docket No. 72-01
General Electric Hitachi Nuclear Energy, Morris Operation
Amendment to Quality Assurance Plan

SUMMARY

By letter, dated October 9, 2015, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15287A286), as supplemented on May 13, 2016 (ADAMS Accession No. ML16134A250), and October 14, 2016 (ADAMS Accession No. ML16288A021), General Electric Hitachi (GEH) Nuclear Energy (the applicant) submitted the Morris Operation Quality Assurance Plan (QAP) to the U.S. Nuclear Regulatory Commission (NRC) for review and approval. The proposed revision to the GEH Morris Operation QAP titled the topical report NEDE-31559, "GEH Nuclear Energy Quality Assurance Plan – Morris Operation," Revision 3 continued to establish a quality assurance program to satisfy each of the applicable criteria in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) Part 72, subpart G.

Specifically, the applicant submitted a proposed application to revise topical report NEDE-31559, "GEH Nuclear Energy Quality Assurance Plan – Morris Operation," Revision 3. The topical report NEDE-31559 is associated with special nuclear material license SNM-2500, and docket numbers 72-01 and 71-0004 for independent spent fuel storage and radioactive material packaging and transportation at the Morris facility, respectively. The applicant proposed revision reflects minor editorial changes, administrative improvements, an updated organization chart and responsibilities, and directed several quality assurance (QA) program areas such as design control, control of purchased material, equipment and services, corrective action program, and audits to another NRC approved GEH QA document, topical report NEDO-11209A, Revision 12.

The NRC staff (the staff) reviewed the application, including relevant supplemental information, using the guidance in NUREG-1567, "Standard Review Plan for Spent Fuel Dry Storage Facilities," Section 12, "Quality Assurance Evaluation," dated March 2000 (ADAMS Accession No. ML003686776). Based on the statements and representations in the application, as supplemented, the staff concluded that the package meets the requirements of 10 CFR Part 72, subpart G.

The following sections include the staff's evaluation and findings in the areas related to the review.

EVALUATION

The NRC's regulation in 10 CFR 72.24(n) have requirements for each application of a license under Part 72 to include a description of the QA program that satisfies the requirements of subpart G. In addition, 10 CFR 72.56 requires, in part, whenever a holder of a specific license desires to amend the license (including a change to the license conditions), an application for an

Enclosure

amendment shall be filed with the Commission fully describing the changes desired and the reasons for such changes. The purpose of this evaluation was to review and evaluate the proposed changes made to topical report NEDE-31559 to assess whether the GEH QAP for the Morris Operation, as revised, continue to comply with the requirements of 10 CFR Part 72, subpart G. The staff reviewed the application, including relevant supplemental information, using the guidance in NUREG-1567, "Standard Review Plan for Spent Fuel Dry Storage Facilities," Section 12, "Quality Assurance Evaluation," dated March 2000 (ADAMS Accession No. ML003686776).

The proposed changes made to the topical report NEDE-31559, "GEH QAP Morris Operation," Revision 3, are as follows:

- 1) Minor editorial changes, administrative improvements, and clarifications to reflect current organization and responsibilities changes. The staff verified that the revised minor editorial changes, administrative improvements, and clarifications continue to comply with the requirements of subpart G for 10 CFR Part 72. The structure of the organization and assignment of responsibility for each activity ensure that designated parties will perform the work to achieve and maintain specified quality requirements.
- 2) The Morris Operation facility used previously approved quality assurance programs from 10 CFR Part 50 and Part 71 to satisfy requirements of 10 CFR 72.140(b), "Establishment of program." As a part of the review, the staff noted that the applicant deleted reference to 10 CFR Part 71, subpart H, and other regulations from the revised QAP Topical Report NEDE-31559, Revision 3. The staff submitted a request for additional information (RAI) (Reference 3) requesting additional details and clarification on whether the applicant plans to continue to apply their previously approved program under 10 CFR Part 50 and Part 71 and with this deletion, how this would affect their docket number 71-0004 QAP since it had the identical topical report number of NEDE-31559. In the RAI response (Reference 4), the applicant determined that the 10 CFR Part 71 provisions should be included in Revision 3 of the QAP with appropriate notes because of the limited Part 71 activities performed at the Morris facility. The applicant also determined that the previously approved 10 CFR Part 71 quality assurance requirements will not apply to Part 72 since Revision 2 of the QAP contained all the requirements needed to satisfy the requirements of subpart G for 10 CFR Part 72. The staff found this approach to be acceptable.
- 3) The applicant revised NEDE-31559, Revision 3, to direct all activities related to design, control of purchased material, equipment and services, corrective action program, and audits to another NRC-approved GEH QA document, topical report NEDO-11209A, Revision 12. The staff recognized during this evaluation that the NRC performed a review, approved the topical report NEDO-11209A, and documented the findings in a safety evaluation (Reference 5). The staff assessed that NEDO-11209A was well-documented and provided adequate control over activities affecting quality, as well as structures, systems, and components that were safety related and important to safety. The staff verified the review of the topical report and found this approach to be acceptable. The staff also assessed that changes made to topical report NEDO-11209A would necessitate a review of the QAP topical report NEDE-31559, Revision 3.

EVALUATION FINDINGS

The staff reviewed and evaluated the QA plan and concluded that it satisfied the requirements of 10 CFR Part 72, subpart G. The staff assessed that:

- The applicant established and delineated the responsibilities, authorities, and duties of persons and organizations performing activities affecting quality.
- The QA plan provided control over activities affecting quality and ensured conformance to approved design of structures, systems, and components that are important to safety.
- The QA plan defined requirements, procedures, and controls that, when properly implemented, will comply with the requirements of 10 CFR Part 72, subpart G.
- The QA plan satisfied the requirements of 10 CFR 72.24(n).

REFERENCES

1. GE Hitachi Nuclear Energy, "Revised Version of the GE Hitachi Nuclear Energy, Morris Operation, Topical Report NEDE-31559, Entitled "GE Hitachi Nuclear Energy Quality Assurance Plan – Morris Operation," Revision 3, MFN 15-085, dated October 9, 2015 (ADAMS Accession No. ML15287A286)
2. Change Evaluation for Revision 3 of the GE Hitachi Nuclear Energy, Morris Operation, Topical Report NEDE-31559, "GE Hitachi Nuclear Energy Quality Assurance Plan – Morris Operation", MFN 16-029, dated May 13, 2016 (ADAMS Accession No. ML16134A250)
3. NRC Letter to GE Hitachi Nuclear Energy, "Request for Additional Information for the Review of the General Electric Hitachi Nuclear Energy, Morris Operation, Topical Report NEDE-31559, "GE Hitachi Nuclear Energy Quality Assurance Plan Morris Operation" (CAC No. L25119), dated September 29, 2016 (ADAMS Accession No. ML16278A033)
4. GE Hitachi Nuclear Energy, Response to Request for Additional Information for Review of Topical Report NEDE-31559, "GE Hitachi Nuclear Energy Quality Assurance Plan Morris Operation," MFN 16-076, dated October 14, 2016 (ADAMS Accession No. ML16288A021)
5. Final SE for Amendment to NEDO-11209A Rev. 12, (QAPD), dated June 6, 2016 (ADAMS Accession No. ML16138A359)

CONCLUSION

Based on the statements and representations contained in the application, the staff concluded that changes to the GEH QAP, Morris Operation, topical report NEDE-31559, Revision 3, are acceptable and in conformance with the applicable requirements of subpart G to 10 CFR Part 72.

Issued on June 9, 2017.