



ATTACHMENT C

SAFETY EVALUATION FOR PROPOSED CHANGES

- 1. Section 1.0** – Deleted reference to “receipt”.

Rationale - The fuel storage basins are essentially full, and even in the event that room would become available due to shipments of fuel currently in storage, no further fuel receiving activities are anticipated or planned for Morris Operation

- 2. Section 1.2.1** - change the CFR reference to "10CFR72, subpart G". Delete reference to Appendix B.8 of the CSAR.

Rationale – The change of CFR reference is in keeping with the requirements of 10CFR72. Appendix B.8 has been deleted from the CSAR.

- 3. Section 1.2.2** – change reference to CSAR Figure 1-5 to CSAR Figure 1-4.

Rationale – Reference changed due to CSAR revision.

- 4. Section 2.1.1 (a)** - Replaced with description of current fuel inventory.

Rationale – All fuel currently on hand (last fuel received January 1989) has been previously found acceptable and in compliance with the limits specified in previous SNM-2500 Amendments. No new fuel receipts are planned, even in the event that room became available in the fuel storage basins because of fuel shipments. Therefore 2.1 has been changed to define the fuel currently in storage.

- 5. Section 2.1.1 (b)** - Deleted

Rationale - Changes in 2.1.1(a) define the authorized type and quantity of fuel authorized for storage at GE-MO. This paragraph bounded the parameters for fuel acceptance. Since fuel receipt is not authorized under this Amendment this paragraph has been deleted.

- 6. Figures 2.1 a, 2-1.b, 2-2.a and 2-2.b** – deleted.

Rationale - Changes in 2.1.1(a) define the authorized type and quantity of fuel authorized for storage at GE-MO. These figures bounded the parameters for fuel acceptance. Since fuel receipt is not authorized under this Amendment these figures have been deleted.

- 7. Section 2.1.1 (b)** - changed from 2.1.1 (c) and changed wording as shown.



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Rationale – Deleted Section 2.1.1(b) in Amendment 9. Alterations in the text were made to clarify GE-MO activities with incidental GE owned equipment.

8. Section 2.1.1 (c) - changed from 2.1.1 (d)

Rationale - Renumbered for consistency.

9. Section 2.3 – Ventilation Exhaust Vacuum deleted

Rationale – The specification was for the Low Activity Waste (LAW) Vault Evaporator. This evaporator ran almost continuously evaporating liquid from the LAW Vault, formerly the primary radioactive waste disposal system for Morris Operation. The LAW Vault has been taken out of service, emptied, all piping to it cut and capped, and it is maintained in lay away condition. The LAW Vault waste evaporator ran continuously, had an evaporation capacity of approximately 1 gallon per minute, required the assist of vacuum in the air tunnel to assure evaporator flow to the air tunnel and air tunnel air flow to move the discharge to the sand filter. It has been removed and replaced with a more suitable evaporator. The current evaporator handles only minutely contaminated water such as from the contaminated laundry, decon shower, etc., operates on a manual start basis, only when needed, approximately 1 to 2 weeks total time per year and is not operated if the ventilation exhaust system was out of operation.

10. Section 4.0 – Added “There is no credible event, planned discharge or design basis accident identified at GE-MO that would expose a member of the public to radiation in excess of limits specified in 10 CFR 72.104 or 10 CFR 72.106”. Deleted reference to Table 4-1 and added "contained in specific GEMO Safety Committee approved Compliance and Operability Tests. Included among these are:"

Rationale – Consistent with CSAR Section 7.0 and 8.0, there is no credible potential for discharge in excess of the reference 10 CFR limits, therefore the need for specified values/limits are not necessary. However, monitoring for the items listed under 4.0 will continue as described in specific Compliance and Operability Tests that require Morris Operation Safety Committee approval.

Table 4-1 – Deleted, see item 10 above.

4.1 Effluent Air. Deleted, effluent air will continue to be monitored and used as the basis for yearly NRC required emissions reports.

4.2.1 Water-evaporation pond and sanitary lagoons. Water evaporation pond no longer exists, it was closed under EPA permit in 1996 when the original GE-MO demineralized water system was replaced with the current contractor supplied and



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maintained resin bed system . The Sanitary lagoons receive sewage waste water and limited ground water only.

- 4.3.1 Sealed sources will continue to be monitored.
- 4.4.1 Instrumentation will continue to be calibrated and monitored per specific GE-MO Compliance and Operability Tests per manufacturers recommended intervals.
- 4.5.1 Basin Water Coolers – Deleted. Outdoor fin/fan coolers were replaced with heat pump chillers in 2000. Basin water no longer goes outdoors removing the need to monitor for leakage to the environment. The heat exchangers are contained in a revetment inside the Basin Pump Room Annex with a sump that would pump any leakage directly back to the basin.
- 4.6.1 Process steam bypass – Deleted, system no longer exists. This system was used only for the spent fuel reprocessing activity. All use of steam was eliminated in 1995.
- 4.7.1 Cask coolant identification – Deleted. This was a requirement for receipt of loaded casks with water coolant. No casks will be received at Morris Operation containing spent fuel or coolant. It is anticipated that casks received for transport of spent fuel to the licensed repository will be the new, single use casks.
- 4.8.1 Cask coolant – Deleted. Same as 4.7.1
- 4.9.1 Basin Water – See Item 17 “Section 4.8.1” below

- 11. Section 4.1, 4.2, 4.3** - Deleted specific references to sampling frequency and concentration limits.

Rationale – See Rationale under Item 10, Section 4.0 above.

- 12. Section 4.4.2** - Deleted paragraph "b. LAW Vault Leak Detection System".

Rationale - The LAW Vault piping has been cut and capped as a continuation of the vault clean-out project. The vault can no longer be used to hold any liquids and the Leak Detection System is no longer needed to monitor for potential contaminated liquid leakage from the vault.

- 13. Section 4.0 Surveillance Requirements** – Revised as detailed below to eliminate instrumentation and systems not requiring a specific calibration level or removed from service.



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Table 4-2 revised per discussion in 4.4.2 below.

4.4.2(a) – Deleted. Basin leak detection system is operational, but specific calibration level is not required for the system to perform its function.

4.4.2(b) – Deleted LAW Vault emptied, cleaned and out of service with all piping cut and capped with no potential for use.

4.4.2(c) – Deleted. See 4.4.2(b) above.

4.4.2(d) – Deleted. Cladding vault is empty and in lay away status.

15. Section 4.5 Coolers – Deleted.

Rationale – The outdoor basin water coolers were removed in 2000 and replaced with indoor heat pump chillers. Amendment 9, Specification 4.5.1 was designed to identify potential leakage that could result in a release of basin water to the environment. Basin water can no longer be released to the environment through the new chillers because the heat exchangers are in a containment located inside of the fuel storage building. If a leak would occur, the containment has a sump that would return the water to the basin.

15. Section 4.7 Cask Coolant - Delete.

Rationale - No casks will be received at Morris Operation containing spent fuel or coolant. It is anticipated that casks received for transport of spent fuel to the licensed repository will be the new, single use casks.

16. Section 4.8 Basin Water Chemical Characteristics – Renumbered to 4.5 and revised to eliminate the need for NaNO₃ and Cl monitoring, and replace pH monitoring with water conductivity measurement as detailed below.

4.5.1, "Specification" - change pH "Acceptable Analysis" to conductivity. Delete requirement for NaNO₃ and Cl.

Rationale - Please refer to attached 72.48 analysis dated July 28, 2004, "Change basin water quality measurement specified in SNM-2500 Section 4.5".

17. Section 4.9 Basin Water Radioactive Contaminants – Renumbered to 4.6

4.9.1 – Delete notification of NRC, 0.1 µCi/ml beta requirement and reference to fuel receiving.



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Rationale – This limit was established for basin water activity during fuel receipt. Fuel receiving activities at Morris Operation are not permitted per submittal of this Amendment.

- 20. Section 5.1 Fuel Storage Basin** – Added reference to 10 CFR 72.48.

- 21. Section 5.2 Fuel Storage System** – Added “important to safety” in description.

Section 5.2.1 through 5.2.5 – Deleted individual descriptions. These SSCs are already described in the CSAR Section 11.0 as important to safety.

Added 5.2.6 Filter Cell Structure, 5.2.7 Fuel Storage Basin Building, 5.2.8 Fuel Basket Grapples, 5.2.9 Fuel Grapples, 5.2.10 Fuel Basin Crane, 5.2.11 Fuel Handling Crane, 5.2.12 Cask Crane and 5.2.13 Spent Fuel Cladding.

- 22. Section 6.2.1** – Added “senior positions and responsibilities within the organization are described in CSAR 9.2.3.”

Rationale – Section 9.0 of the CSAR contains both an organization chart and a description of the senior level management positions. If when a change in position titles or position description occurs, currently a license revision is required. The changes would be submitted for review/approval as CSAR revisions so NRC will still be able to review/approve and change.

- 23. Section 6.2.2** - Delete this section entirely.

Rationale – See Item 22 above, in addition, these positions and qualification requirements are described in specific GE and GE-MO Human Resource position descriptions.

- 24. Section 6.3.2(b)** – Change wording to remove reference to receipt of loaded shipping casks. Added wording for handling of loaded casks for shipment and performance of safety analysis per 10 CFR 72.48.

Rationale – Loaded shipping casks will no longer be received at GE-MO, however, shipping casks could be loaded, handled and shipped.

- 25. Section 6.3.2(e)** - Replace "waste" with "water".

Rationale - clarification.

- 26. Section 6.4.1, "Safety Committee"** - Delete all references to the word "Plant" as a prefix to "Safety Committee". Change members required for a meeting from "Four" to "Three".



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Delete specific member titles and change to "members as determined by the Manager, Morris Operation and described in a Safety Committee operating procedure and CSAR Section 9.0, Figure 9-2."

Rationale - Deleting of "Plant" is internal preference for the Committee name. The number of members in the Safety Committee due to staff reductions (see attached organization chart and CSAR Figure 9-2) has been changed to five (5), so by Safety Committee approval, three (3) are required to conduct business. Specific members by title, are described in the Safety Committee operating procedure and CSAR Section 9.0, Figure 9-2. This change reflects General Electric's plans for the long term operation of Morris Operation. Any change would be submitted for review/approval as CSAR revisions so NRC will still be able to review/approve and change.

- 27. Section 6.5 Action Required for Specification Noncompliance** – Changed to clarify actions and notifications required.

6.5.1(a) – Deleted "When feasible"

6.5.1(b) – Deleted "Plant", see Item 26 above.

6.5.1(c) – Deleted requirement to notify NRC regional office with "NRC Operations Center" as required by NRC.

6.5.1(d) – Deleted "Plant", see Item 26 above.

6.5.2(b) – Deleted "Plant", see Item 26 above.

6.5.2(c) - Deleted requirement to notify NRC regional office with "NRC Operations Center" as required by NRC.

6.5.3(b) - Deleted "Plant", see Item 26 above.

6.5.4 – Added 10 CFR 72.48

6.6.1(b) - Deleted "Plant", see Item 26 above.

6.6.1(d) - Added 10 CFR 72.48

- 28. Reference and Notes** – Deleted reference 3. Casks are no longer shipped with coolant and the requirement has been removed. Renumbered reference 4 to 3.
- 29. Section 8.0 Environmental Protection** – This entire section has been revised as described below.



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Table of Contents – Deleted as unnecessary to the section.

Table 8-1 Table of Contents – Deleted as unnecessary to the section.

8.0 Introduction – Deleted “Receipt” as no further fuel will be received at GE-MO.

8.1.1 – Deleted Table 8-1 reference and added “specific GE-MO Safety Committee approved Compliance and Operability Tests”.

Rationale – See Attached GE-MO Offsite Dose Calculation Manual contained in CSAR Appendix B.22

Section 8.2.2, "Basis" - Change 10CFR72 reference from 72.33(d)(3) to 72.44(d)(3) in keeping with 10CFR72.

Table 8-1, "Morris Operation Radiological Monitoring Program" - delete.

Rationale - Please refer to the attached "Offsite Dose Calculation Manual" and 72.48, "Justification for Change to the MO Environmental Monitoring Program". The existing table does not address the five perceived methods of affecting radiation dose to the public: direct radiation, airborne particulate, airborne immersion, surface water and ground water. These are now addressed in specific GEMO radiological/environmental monitoring procedures and are addressed in the annual report.