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Enclosure 14

CoC 1004

Updated Final Safety Analysis Report

Revision 14

Markup for Revisions to CoC 1004 Amendments 0 to 11, and 13

[1] The recovery operations listed in this section assume the cask drop occurs during initial transfer and loading of the DSC into the HSM, when the spent fuel pool is still operational and available. If a drop of the Transfer Cask with a loaded DSC from a height greater than fifteen inches occurs during transfer to a transportation cask and an inspection determines that the DSC is damaged with possible fuel confinement boundary breaches and a spent fuel pool is not available onsite, the DSC shall be put into a safe condition. If required, the DSC could be transported offsite to a site licensed for either dry or wet unloading of the DSC.

the required actions to be performed following the event depend upon the severity of the event and the resultant cask and trailer/skid damage.

8.2.5.4 Recovery

For drop heights of less than fifteen inches the transfer cask will be loaded back onto the transfer skid/ trailer and moved to the HSM. The DSC will then be transferred to the HSM in the normal manner described previously. For drop heights greater than fifteen inches the transfer cask and contents will be returned to the plant's fuel/reactor building. There the DSC will be inspected for damage, and the DSC opened and the fuel removed for inspection, as necessary. Removal of the transfer cask top cover plate may require cutting of the bolts in the event of a corner drop onto the top end. This operation will take place in the decontamination pit after recovery of the transfer cask. Removal of the DSC cover plates and shield plug assembly are described in Section 5.0. (1)

Following recovery of the transfer cask and unloading of the DSC, the transfer cask will be inspected, repaired and tested as appropriate prior to reuse.

For drop heights approaching the design basis conditions, it may be necessary to develop a special sling/lifting apparatus to move the transfer cask from the drop site to the fuel pool. This may require several weeks of planning to ensure all steps are correctly organized. During this time, additional blankets can be added to the transfer cask to minimize on-site exposure to site operations personnel. The transfer cask will be roped off to ensure the safety of the site personnel. (1)

8.2.6 Lightning

8.2.6.1 Postulated Cause of Event

The likelihood of lightning striking the HSM and causing an off-normal condition is not considered to be a credible event. Lightning protection system requirements are site specific and depend upon the frequency of occurrences of lightning storms in the proposed ISFSI location and the degree of protection offered by other grounded structures in the proximity of the HSMs. The addition of simple lightning protection equipment, required by plant criteria, to HSM structures (i.e., grounded handrails, ladders, etc.) is considered a miscellaneous attachment and is acceptable as per Note 9 of the General Arrangement drawing (Dwg. No. NUH-03-6008).

8.2.6.2 Analysis of Effects and Consequences

Should lightning strike in the vicinity of the HSM the normal storage operations of the HSM will not be affected. The current discharged by the lightning will follow the low impedance path offered by the surrounding structures. Therefore, the HSM will not be damaged by the heat or mechanical forces generated by current passing through the

, if available,

9.6 Decommissioning Plan

Decommissioning of a NUHOMS® ISFSI can be performed in a manner consistent with that for decommissioning of the plant itself. It is anticipated that the DSCs will be transported intact to a Federal repository off-site when such a facility is operational. However, should the storage facility not accept the DSCs intact, the NUHOMS® system allows the DSCs to be brought back into the spent fuel pool and the fuel off-loaded to racks for subsequent loading into transport casks provided by the Department of Energy.

All components of the NUHOMS® system are manufactured of materials similar to those found at existing plants (e.g., reinforced concrete, stainless steel, lead). These components can therefore be decommissioned by the same methods in place to handle those materials within the plant. Any of the components that may be contaminated can be cleaned and/or disposed of using the decommissioning technology available at the time of decommissioning.

The NUHOMS® system is a dry containment system that effectively confines all contamination within the DSC. When the DSC is removed from the HSM, the free-standing HSM can be manually decontaminated for any trace activity, dismantled and removed from the site. It is possible that a thin layer of material comprising the inner wall of the HSM could become activated by the neutron flux from the fuel after an extended period of service. Estimates of the potential for activation are difficult due to the variability of rare earths which may be present in the local aggregate. The specific activity of the HSM inner wall surfaces may be measured at the time of decommissioning and compared with the existing guidelines to determine whether the values are below regulatory concern (BRC). Disposal procedures can then be developed which comply with existing guidelines at the time of decommissioning.

Removal of fuel assemblies from the DSC can be accomplished in the plant's spent fuel pool, as described in Chapter 5. The DSC is also being qualified for off-site shipment in a compatible transportation cask licensed to 10CFR71. If such transport is made, the DSC may be disposed of as-is at the permanent geologic repository in a suitable overpack container. If the DSC is not compatible with the repository handling or packaging systems, fuel transfer to a suitable container can be performed in a large hot cell or off-site fuel pool.

The general license holder under 10CFR72.210 shall meet the requirements specified in 10CFR72.30.

if available,