E-42575

Enclosure 13

CoC 1004 Amendment 13

Technical Specifications

Markup for Revision 1

AMENDMENT NUMBER *13* TO COC 1004

REVISION 1

TECHNICAL SPECIFICATIONS FOR THE STANDARDIZED NUHOMS® HORIZONTAL MODULAR STORAGE SYSTEM

DOCKET 72-1004

5.0 ADMINISTRATIVE CONTROLS

5.1 Procedures

Each user of the standardized NUHOMS® System shall prepare, review, and approve written procedures for all normal operations (cask handling, loading movement and surveillance) and maintenance at the ISFSI prior to its operation. The operating procedures suggested generically in the UFSAR should provide the basis for the user's written operating procedures. Written procedures shall be established, implemented, and maintained covering the following activities that are important to safety:

- Organization and management
- Routine ISFSI operations
- Alarms and annunciators
- Emergency operations
- Design control and facility change/modification
- Control of surveillances and tests
- Control of special processes
- Maintenance
- Health physics, including ALARA practices
- Special nuclear material accountability
- Quality assurance, inspection, and audits
- Physical security and safeguards
- Records management
- Reporting
- All programs specified in Section 5.2

, if available

The fuel removal procedure which shall be part of the users operating procedures as a minimum shall include:

If fuel needs to be removed from the DSC, either at the end of service life or for inspection after an accident, precautions must be taken against the potential for the presence of damaged or oxidized fuel and to prevent radiological exposure to personnel during this operation. This can be achieved with this design by the use of the purge and fill valves which permit a determination of the atmosphere within the DSC before the removal of the inner top cover and shield plugs, prior to filling the DSC cavity with water (borated water for the 24P, 32PT, 24PHB, 24PTH, 32PTH1, *or 37PTH*). If the atmosphere within the DSC is helium and radioactivity check of the atmosphere in the DSC cavity did not detect the presence of any airborne radioactive particulates, then operations should proceed normally with fuel removal either via the TC or in the pool. However, if air or airborne radioactive particulates are present within the DSC, then appropriate filters should be in place to preclude the uncontrolled release of any potential airborne radioactive particulate from the DSC via the purge-fill valves. This will protect both personnel and the operations area from potential contamination. For the accident case, personnel protection in the form of respirators or supplied air should be considered in accordance with licensee's Radiation Protection Program.

(continued)

5.3 Cask Transfer Controls

- This ambient temperature limit applies to all TRANSFER OPERATIONS of a loaded TC/DSC outside the FUEL BUILDING.
- Confirm what the ambient temperature is before transfer of the TC/DSC and every 2 hours when the loaded cask is exposed to direct insolation during TRANSFER OPERATIONS. If the ambient temperature before the transfer operation is greater than 100 °F or if the ambient temperature is expected to exceed the above limits provide an appropriate solar shield.

Replace with INSERT A

5.3.2 Cask Drop

~~Inspection Requirement~~

~~The DSC shall be inspected for damage after any TC drop of fifteen inches or greater. In the event of a drop of a loaded TC/DSC from height greater than 15 inches outside or inside the FUEL BUILDING:~~

> ~~The DSC shall be inspected to ensure that it will continue to provide confinement of fuel. If the inspection reveals that above requirement is not satisfied, then fuel in the DSC shall be returned to the reactor spent fuel pool, the DSC shall be removed from the service and evaluated for further use, and the TC shall be inspected for damage and evaluated for further use.~~

5.3.3 TC Alignment with HSM or HSM-H

The TC shall be aligned with respect to the HSM or HSM-H such that the longitudinal centerline of the DSC in the TC is within ± ⅛ inch of its true position when the TC is docked with the HSM front access opening. This specification is applicable during the insertion and retrieval of all DSCs from the TC to HSM and back.

If the alignment tolerance is exceeded, the following actions should be taken:

a. Confirm that the transfer systems is properly configured,
b. Check and repair the alignment equipment, or
c. Confirm the locations of the alignment targets on the TC and HSM.

5.3.4 Trailer Shielding Drop onto OS197L TC

The DSC and the OS197L TC and the trailer shielding shall be inspected for damage and evaluated for further use after the accident drop of the trailer shielding onto the OS197L TC.

The lifting of outer top trailer shielding is restricted such that the bottommost part of the body of the outer top trailer shielding is less than 4 inches above the inner top trailer shielding.

INSERT A

Inspection Requirement

The DSC will be inspected for damage after any TC drop of fifteen inches or greater.

Background

TC/DSC handling and loading activities are controlled under the 10 CFR Part 50 license until a loaded TC/DSC is placed on the transfer trailer, at which time fuel handling activities are controlled under the 10 CFR Part 72 license. Although the probability of dropping a loaded TC/DSC while en route from the Fuel Handling Building to the ISFSI is small, the potential exists to drop the TC 15 inches or more.

Safety Analysis

The analysis of bounding drop scenarios shows that the TC will maintain the structural integrity of the DSC confinement boundary from an analyzed side drop height of 80 inches. The 80-inch drop height envelopes the maximum vertical height of the TC when secured to the transfer trailer while en route to the ISFSI.

Although analyses performed for TC drop accidents at various orientations indicate much greater resistance to damage, requiring the inspection of the DSC after a side drop of 15 inches or greater ensures that:

1. The DSC will continue to provide confinement.

2. The TC can continue to perform its design function regarding DSC transfer and shielding.