

### 3.0 ADMINISTRATIVE CONTROLS AND PROGRAMS

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The following programs shall be established, implemented and maintained.

#### 3.1 Training Program

A training program for the HI-STAR 100 cask system shall be developed under the general licensee's systematic approach to training (SAT). Training modules shall include comprehensive instructions for the operation and maintenance of the HI-STAR 100 spent fuel storage cask system and the independent spent fuel storage installation (ISFSI).

#### 3.2 Pre-Operational Testing and Training Exercise

A dry run training exercise of the loading, closure, handling, unloading, and transfer of the HI-STAR 100 system shall be conducted by the licensee prior to the first use of the system to load spent fuel assemblies. The training exercise shall not be conducted with spent fuel in the MPC/OVERPACK. The dry run may be performed in an alternate step sequence from the actual procedures, but all steps must be performed. The dry run shall include but is not limited to the following:

- a. Moving the HI-STAR 100 MPC/OVERPACK into the spent fuel pool.
- b. Preparation of the HI-STAR 100 Cask System for fuel loading.
- c. Selection and verification of specific fuel assemblies to ensure type conformance.
- d. Locating specific assemblies and placing assemblies into the MPC (using a dummy fuel assembly), including appropriate independent verification.
- e. Remote installation of the MPC lid and removal of HI-STAR 100 MPC/OVERPACK from the spent fuel pool.
- f. MPC welding, NDE inspections, hydrostatic testing, draining, vacuum drying, helium backfilling, and leakage testing.

- g. HI-STAR 100 OVERPACK closure, draining, vacuum drying, helium backfilling and leakage testing.
- h. HI-STAR 100 OVERPACK upending/downending on the horizontal transfer trailer or other transfer device, as applicable to the site's cask handling arrangement.
- i. Placement of the HI-STAR 100 Cask System at the ISFSI.
- j. HI-STAR 100 Cask System unloading, including cooling fuel assemblies, flooding MPC cavity, removing MPC lid welds.

### 3.3 Special Requirements For First Systems In Place

The heat transfer characteristics of the cask system will be recorded by temperature measurements for the first HI-STAR 100 systems (MPC-24 and MPC-68) placed into service with a heat load equal to or greater than 10 kW. An analysis shall be performed that demonstrates the temperature measurements validate the analytic methods and predicted thermal behavior described in Chapter 4 of the SAR.

Validation tests shall be performed for each subsequent cask system that has a heat load that exceeds a previously validated heat load by more than 2 kW. (e.g., if the initial test was conducted at 10 kW, then no additional testing is needed until the heat load exceeds 12 kW). No additional testing is required for a system after it has been tested at a heat load equal to or greater than 16 kW.

Letter reports summarizing the results of each validation test shall be submitted to the NRC in accordance with 10 CFR 72.4. Cask users may satisfy these requirements by referencing validation test reports submitted to the NRC by other cask users.

### 3.4 Radioactive Effluent Control Program

This program implements the requirements of 10 CFR 72.44(d).

- a. The HI-STAR 100 system does not create any radioactive materials or have any radioactive waste treatment systems. Therefore, specific operating procedures for the control of radioactive effluents are not required. Specification 2.1.1, Multi-Purpose Canister (MPC), provides assurance that there are no radioactive effluents from the SFSC.

## Administrative Controls and Programs

- b. This program includes an environmental monitoring program. Each general license user may incorporate SFSC operations into their environmental monitoring program for 10 CFR Part 50 operations.
- c. An annual report shall be submitted pursuant to 10 CFR 72.44(d)(3).