PREOPERATIONAL TESTING OF INDEPENDENT SPENT FUEL STORAGE FACILITY INSTALLATIONS AT OPERATING PLANTS

PROGRAM APPLICABILITY: 2515

60854.1-01 INSPECTION OBJECTIVE

To provide for NRR funding for those portions of IP 60854, “Preoperational Testing of an Independent Spent Fuel Storage Installation,” that are applicable to an operating nuclear power plant.

60854.1-02 INSPECTION REQUIREMENTS

The following are the prioritized sections from IP 60854 that are to be performed at operating plants:

02.02 Verify that the preoperational test procedures for DCSS loading, unloading, and transfer activities and their acceptance criteria meet the commitments and requirements specified in the DCSS SAR, SER,CoC,10 CFR Part 72, the site-specific license and TS as applicable, any related 10 CFR 50.59 and 72.48 evaluations, and 10 CFR 72.212(b) evaluations for general licensed ISFSIs.

02.03 Verify that preoperational test procedures, for the activities listed below, have been prepared, reviewed, and initially approved in accordance with the licensee's administrative programs. Determine if the licensee has completed a verification and validation of the procedures. If the licensee has used multiple procedures, then verify that sufficient overlap has been maintained to ensure all required critical activities, such as those listed below, will be performed.

a. For transferring spent fuel from the SFP to the ISFSI:

   1. Moving the empty cask or canister into the SFP area.
   2. Placing the cask or canister in the SFP.
   3. Verification of selected fuel and movement of fuel from SFP into the cask or canister.
   4. Documenting the parameters and characteristics of spent fuel placed in the cask or canister per the license or CoC.
   5. Lifting the cask or canister from the SFP.

6. Sealing the cask or canister.
7. Evacuating water from the cask or canister and vacuum drying.
8. Gas backfilling the cask or canister and decontaminating.
9. Transferring the loaded cask or canister to the transport vehicle.
10. Transporting the cask or canister to the ISFSI.
11. Placing the cask or canister in the ISFSI.

b. For retrieving spent fuel from a loaded DCSS in the ISFSI and returning it to the SFP:

1. Retrieving of the cask or canister from the ISFSI.
2. Transporting the cask or canister from the ISFSI to the reactor or fuel building.
3. Sampling the cover gas for indications of fuel damage such as radioactivity or air in leakage, and directing operator response if the sample indicates fuel damage.
4. Venting of the cover gas and backfilling of the cask or canister with water.
5. Unsealing the cask or canister for access.
6. Transferring the cask or canister to the SFP.
7. Transporting the fuel from the cask or canister to the SFP.
8. Removing the cask or canister from the SFP and decontaminating.
9. Storing or disposing of the cask or canister.

c. For inspection guidance on retrieving spent fuel from a loaded DCSS in the ISFSI and performing a dry transfer to a different DCSS component, contact Spent Fuel Project Office (NMSS/SFPO) for assistance.

02.04 Verify, through interviews and reviews of selected records, that licensee personnel conducting preoperational test activities have a clear understanding of their duties and responsibilities, and that:

c. Oversight and command and control responsibilities have been clearly established, including notification requirements.

d. Specific radiological hazards are identified and controls implemented.

02.05 Verify that equipment used during preoperational test activities has been tested and/or evaluated for its impact on plant structures, systems and components before performance of the preoperational tests.

02.07 Evaluate the effectiveness of the licensee's management oversight and QA assessments of preoperational testing activities.

02.08 Evaluate the effectiveness of the licensee's plans and preparations for controlling radiological activities, by reviewing documents and interviewing individuals. Evaluate the effectiveness of radiological controls and monitoring and the effectiveness of security controls during preoperational testing.

02.09 If the procedures used by the licensee during the dry run have not received final approval yet, then re-perform the reviews described in Section 02.03 after the licensee has issued the procedures for use. Similarly, prior to ISFSI operation, ensure that any plant programs and procedures reviewed in Section 02.06 that were not yet finalized have been, any outstanding issues related to them have been resolved, and the programs and procedures have received the appropriate reviews and approval.

02.10 By direct observation and evaluation of selected activities, such as those listed in Section 02.03.a, independently assess whether the licensee has adequately demonstrated its readiness to safely transfer spent fuel from the SFP to the ISFSI.

60854.1-03 INSPECTION GUIDANCE

Guidance is located in IP 60854 for applicable sections.

60854.1-04 RESOURCES

Starting in FY 2004 (to account for NRR funding), this IP should be used in time reporting IP 60854 inspections at operating plants. Estimated hours for the above prioritized sections are:

Initial Inspection New ISFSI, General Licensee	Initial Inspection New ISFSI, Site Specific Licensee
227	227

60854.1-05 REFERENCE

Boger / Brach memorandum dated February 20, 2002, “Response to Regional Input on ISFSI Resources”, Table 1, lists the prioritized ISFSI IP sections required to be performed at operating plants and the estimated resources for these sections.

END