UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET, SW, SUITE 23T85
ATLANTA, GEORGIA 30303-8931

August 10, 2005

Southern Nuclear Operating Company, Inc.
ATTN: Mr. L. M. Stinson
Vice President - Farley Project
P. O. Box 1295
Birmingham, AL 35201-1295

SUBJECT: JOSEPH M. FARLEY NUCLEAR PLANT - INDEPENDENT SPENT FUEL STORAGE INSTALLATION (ISFSI) DRY RUN NRC INSPECTION REPORT 07200042/2005001, 05000348/2005012 ,and 05000364/2005012

Dear Mr. Stinson:

On July 14, 2005, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Farley Nuclear Plant following the successful loading, transport, and storage of the first Independent Spent Fuel Storage Installation (ISFSI) cask. The enclosed inspection report documents the inspection findings, which were discussed on June 24 and August 10, 2005, with
Mr. Randy Johnson and Mr. Wes Sparkman of your staff, respectively.

The inspection examined activities conducted under your ISFSI license as they relate to safety and compliance with the Commission's rules and regulations. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel. These inspections included observation of activities associated with your pre-operational testing program and the loading of your first ISFSI cask. The pre-operational testing and training exercises are performed to satisfy the requirements of the Holtec Certificate of Compliance (CoC) 1014. The inspections were conducted to confirm compliance of your program and activities with the requirements specified in the CoC, Technical Specifications, Final Safety Analysis Report and the NRC's Safety Evaluation Report for the HOLTEC HI-STORM 100 dry cask storage system.

The enclosed report presents the results of this inspection. Overall, the inspection found that activities were being performed in accordance with procedural and regulatory requirements. Based on direct observation of activities and review of the various procedures, the inspectors determined that the licensee was capable of safely loading spent fuel from the Spent Fuel Pool (SFP) into the Multi Purpose Cannister (MPC), and performing the steps necessary to close the MPC, including draining, vacuum drying, helium backfill, and helium leakage rate testing. Furthermore, the licensee was capable of transporting the storage cask to the ISFSI pad. Procedures and administrative controls have been established to ensure compliance with CoC requirements. The inspectors also determined that the licensee was capable of re-transferring spent fuel from the ISFSI to the SFP.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's

SNC, INC.

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system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).
If you have any questions concerning this inspection, please contact Mr. Binoy Desai, Senior Project Engineer, at (404) 562-4519 or the undersigned at (404) 562-4510.

Sincerely,

/RA/

Kerry D. Landis, Chief
Reactor Projects Branch 5
Division of Reactor Projects

Docket Nos. 72-42, 50-348, and 50-364
License Nos. CoC 1014. Amendment 2 (HOLTEC)

Enclosure: NRC Inspection Report 07200042/2005-001, 05000348 and 364/2005-012

cc w/encl:

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U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos.:	72-42, 50-348, 50-364
License Nos.:	CoC 1014, Amendment 2
Report Nos.:	07200042/2005001, 05000348/20050012 and 05000364/20050012
Licensee:	Southern Nuclear Operating Company, Inc. (SNC)
Facility:	Joseph M. Farley Nuclear Plant
Location:	7388 N. State Highway 95 Columbia, AL 36319
Dates:	June 13 - July 14, 2005
Inspectors:	Binoy Desai, Senior Project Engineer (Team Leader) Justin Fuller, Reactor Inspector, Region II Timothy Kolb, Operator Licensing Examiner, Region II Frank Jacobs, Safety Inspections Engineer, NMSS Antonio Dias, Licensing Reviewer, NMSS Michel Call, Licensing Reviewer, NMSS Jerome Blake, Consultant, Region II
Approved by:	Kerry D. Landis, Chief Reactor Projects Branch 5 Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

FARLEY NUCLEAR PLANT - INDEPENDENT SPENT FUEL STORAGE INSTALLATION (ISFSI)

NRC Inspection Report 07200042/2005001 and 05000348,364/2005012

The Farley Nuclear Plant developed and implemented a dry cask storage program to remove spent fuel from the reactor spent fuel pool (SFP) for storage at the Farley Independent Spent Fuel Storage Installation (ISFSI). The ISFSI is located within the current reactor protected area.

The licensee utilized the HOLTEC cask system for spent fuel storage needs. The HOLTEC system consists of a stainless steel multi purpose canister (MPC) in which the spent fuel is placed. This transportable MPC is welded shut and placed in a HI-STORM 100 vertical concrete cask which is then transported to the ISFSI pad. All handling and movement of the loaded MPC prior to insertion into the concrete cask is performed with the MPC inside the HI-TRAC cask. The HI-TRAC provides the necessary shielding of the MPC to allow workers to perform duties near the MPC which include welding, vacuum drying, backfilling with helium, as well as performing the necessary tests on the welds to ensure quality of the welds.

The NRC conducted onsite inspections of the activities associated with the licensee's HOLTEC cask storage program. NRC Inspectors were also present for the heavy lift of the loaded MPC and the lowering of the MPC into the HI-STORM. The NRC inspections focused on the licensee's efforts to demonstrate that adequate equipment, procedures, and personnel were in-place to safely move spent fuel from the SFP to the ISFSI pad. The pre-operational test requirements covered key activities related to loading a cask and moving the cask to the ISFSI pad. Throughout the demonstrations observed by the NRC, the Farley staff functioned professionally and performed their assigned duties safely.

Based on direct observation of activities and review of the various procedures, the inspectors determined that the licensee was capable of safely loading spent fuel from the SFP into the MPC, and performing the steps necessary to close the MPC, including draining, vacuum drying, helium backfill, and helium leakage rate testing. Furthermore, the licensee was capable of transporting the storage cask to the ISFSI. Procedures and administrative controls have been established to ensure compliance with CoC requirements. The inspectors also determined that the licensee was capable of re-transferring spent fuel from the ISFSI to the SFP.

NRC made several observations during the licensee dry run demonstrations. These observations were captured by the licensee in the corrective action program documents, Condition Report (CRs).

Report Details

1. Dry Run Observations

a. Inspection Scope (60854.1)

The inspectors observed licensee dry run demonstrations for the HOLTEC Independent Spent Fuel Storage Installation (ISFSI) system at the Farley Nuclear Plant from June 13, 2005 through June 24, 2005. The dry run activities were intended to demonstrate licensee (Farley) readiness in their capability to safely load, seal, transport, and store spent fuel in the ISFSI system. During the course of the inspection, the inspectors verified and/or observed the following attributes to assess licensee performance relating to dry cask storage activities:

- Licensee's pre-operational test program to determine if the licensee is capable of safely using the HOLTEC cask system. The pre-operational test program is intended to ensure that the conditions and requirements of the Certificate of Compliance (CoC) are being met and that the licensee is capable of safely loading spent fuel into the ISFSI and transferring spent fuel back to the spent fuel pool (SFP) from the ISFSI pad.

- The licensee had completed an evaluation to verify compliance with the conditions of the HOLTEC system design, Final Safety Analysis Report (FSAR), and requirements in 10 CFR Part 72.

- The licensee had established a safe loads path for cask related heavy load movement activities.

- The licensee had incorporated into procedures the correct requirements for helium backfill of the canister after drying. The acceptable leak rates for passing the test were consistent with the requirements in the Technical Specifications (TS). Personnel assigned to perform the leak tests were qualified to the appropriate leak test certification requirements.

- Vacuum drying time limits and acceptance criteria had been incorporated into procedures.

- Strong radiological controls had been established to support cask activities.

- Licensee demonstration involving: lifting the empty Multiple Purpose Canister (MPC) with the HI-TRAC cask into the loading pit; setting the lid on top of the MPC; verification of positive engagement of lifting devices to the trunnions; fuel loading (using "simulated assemblies"), moving the loaded cask to the cask setting area by following the heavy load lifting path; automatic welding of the lid to the MPC shell; liquid penetrant examinations (PT), vacuum drying the MPC, helium backfill of the MPC, transferring the MPC from the HI-TRAC to the HI-STORM using the mating device, transporting the HI-STORM to the pad, and

placing the HI-STORM on the pad.

- Auxiliary building crane operation to ensure that heavy loads could be lifted by the auxiliary building crane and then transferred by the HI-STORM transporter along the safe load path, without compromising the licensing basis margins of safety. The inspectors reviewed qualification, maintenance, and surveillance records for the auxiliary building crane and the HI-STORM transporter operators. In addition, the inspectors reviewed the operating limitations for the auxiliary building crane, and compared the auxiliary building crane rated load to the anticipated operating load. The inspectors reviewed completed procedures for the annual, monthly, and daily mechanical inspections of the auxiliary building crane.

- The licensee's records program had incorporated the various requirements for creating and maintaining ISFSI records.

- The training program for personnel assigned to the ISFSI provided a good basis for understanding the requirements and safe practices associated with dry cask loading operations.

b. Observations and Findings

The inspectors reviewed licensee procedures and observed the implementation of the procedures which tested the site's capability to safely load spent fuel from the SFP into the MPC and transfer it to the ISFSI pad. The procedures were well developed and complete. The licensee held pre-job briefings prior to each segment of the procedure. These pre-job meetings were conducted such that necessary items to enhance safety (such as the need for three way communication, pre-staging of equipment, specific assignment of job functions by name and reinforcement of teamwork among work parties) were discussed. The briefs included reviews, select portions of procedures and discussion for particular contingencies during loading activities.

Inspectors observed crane operation to ensure that heavy loads could be safely lifted and transferred. Lifts of the MPC and the HI-TRAC combined were witnessed. The inspectors observed good communication and teamwork between departments.

The inspectors reviewed licensee procedures and observed the implementation of the procedures related to the MPC movement, fuel loading, blowdown /draining, vacuum drying, and helium backfill and cooldown operations.

The licensee was prompt in initiating corrective action documents for areas requiring improvement during the dry run activities. The inspectors discussed with Regulatory Compliance, Fuel Engineering, and Reactor System Engineering personnel the process required for lid removal and cask unloading should it become necessary.

The inspectors made the following observations during the dry run. Though none of the observations constituted an immediate safety or regulatory compliance issue, the licensee initiated corrective actions to address the observations.

- During the transportation of the HI-STORM to the pad using the transporter, the team noted that during turns, the gravel filled soil exhibited susceptibility to dislocation due to soft patches. The licensee also noted the condition, and current plans are to add additional large size gravel and perform additional compacting. These efforts may already be underway. The licensee did not exceed lift height limits or allow the loaded overpack to drag the surface during this operation. CR 2005105916 was initiated.

- During a review of licensee incorporation of operating experience related to the ISFSI, the team noted that the licensee had not reviewed NRC Information Notices that had been issued prior to the onset of the ISFSI program at Farley. CR 2005106206 was initiated by the licensee to document this deficiency. The licensee plans to perform a historical search of Information Notices and incorporate lessons learned where applicable at Farley. The team did note that operating experience from other sources had been incorporated and was particularly noteworthy during pre-job briefs.

- The team noted during cask handling that the main hook on the cask crane was at a slight angle (tilt) when not carrying any load. A previous CR (2005100634) had been written for the same issue. A Work Request (WR) had been initiated and subsequently voided based on discussion with the maintenance supervisor who originated the CR and subsequently determined that no action was needed. The CR was dispositioned to the WR. The inspectors discussed the crane hook and determined that the crane leveler adjusts the hook angle when loaded as designed. The inspectors also verified the position of the loaded crane hook, which had no tilt. However, the inspectors questioned the voiding of the WR as well as closing of the CR without any explanation. A new CR (CR 2005106264) was originated by the licensee. The inspector did note that the crane is equipped with an equalizing system that assures that the load is appropriately distributed between the dual reeving systems. Should either system experience greater than approximately half of the load being lifted, the equalizing system is designed to remove power from the crane until the load is adjusted.

- On June 23, while observing the process to initiate Alternate Cooling after performing MPC Cooldown, the team observed several issues with the pre-staged equipment which contributed to the one hour procedural guideline to initiate MPC filling to be exceeded. The flow rate assembly fittings had been loosened without being re-sealed which resulted in a leak that required the pumping process to be stopped. Also, the fitting assembly for the inlet check valve was installed backwards which would have resulted in no flow. Also, additional time could have been saved if some actions were performed in parallel with shutting down the Helium Cooldown Unit as allowed by the procedure. CR 2005106242 was written. The one hour procedural guidance to initiate MPC filling is not a CoC requirement.

- On June 22, while reviewing the Technical Specification requirements, a question was asked by the team relating to how the operating shift would

determine any reportability requirements if an ISFSI issue arose. It was determined that the Reportability Procedure, EIP-8.0, had not been revised as expected by the Operations Personnel to reflect non-emergency notifications. The licensee initiated a night order to the operating shift and EIP-8.0 was subsequently revised to provide the appropriate guidance to assist determinations regarding event reportability.

- The team interviewed Farley and Southern Nuclear personnel regarding the tracking and status of Condition Reports associated with ISFSI activities. The team was unable to determine that there was a procedure or plan in place to assure Condition Reports and other relevant issues affecting ISFSI activities would be identified and appropriately dispositioned prior to commencement of cask loading activities. The inspectors were informed that the licensee utilized a dry storage action plan to capture the appropriate prerequisites needed in preparation of the dry cask loading campaign.

- During the Dry Run activities, the team observed that the licensee used the 15-Ton auxiliary hook to move the MPC lid into the cask welding pit through the Spent Fuel Room hatch. Although the licensee procedures did not prohibit this lift and the lift was consistent with the guidance of NUREG-0612, the team questioned the use of a hoist that is not single failure proof. Further, this use of the auxiliary hoist did not meet licensee expectation for heavy load lifting around the spent fuel room area. The licensee entered this issue into their corrective action program as CR 2005106218, and instructed the crane operator to not use the auxiliary hoist to lift the MPC lid, pending further guidance. The inspectors were informed that Dry storage procedures were later revised to prohibit use of the auxiliary hook for lifting loads greater than 3,000 lbs. over the Auxiliary Building roof.

In conclusion, based on direct observation of activities and review of the various procedures, the inspectors determined that the licensee was capable of safely loading spent fuel from the SFP into the MPC, and performing the steps necessary to close the MPC, including draining, vacuum drying, helium backfill, and helium leakage rate testing. Furthermore, the licensee was capable of transporting the storage cask to the ISFSI. Procedures and administrative controls have been established to ensure compliance with CoC requirements. The inspectors also determined that the licensee was capable of re-transferring spent fuel from the ISFSI to the SFP.

2 Part 72.212(b) Requirements (IP 60856)

a. Inspection Scope

The inspectors reviewed draft revision D of the Farley Nuclear Plant 10 CFR 72.212 Report to determine if the licensee was in compliance with the requirements of 10 CFR 72.212(b). The inspectors examined documents and interviewed Farley and Southern Nuclear Company personnel regarding selected requirements of 10 CFR 72.212(b).

b. **Observations and Findings**

The licensee performed written evaluations which established that: the conditions set forth in CoC 1014, Amendment 2, have been met; the cask storage pads have been designed to support the stored static load of the storage casks; and the requirements of 10 CFR 72.104 regarding effluents and direct radiation from the ISFSI have been met.

The licensee reviewed Final Safety Analysis Report (FSAR) HI-2002444, Revision 3, referenced in CoC 1014, and the associated NRC Safety Evaluation Report (SER). The licensee determined that the cask design bases are enveloped by the reactor site parameters for ambient temperature and temperature extremes, flooding, tornadoes, earthquakes, lightning, fire and explosion, snow and ice loads, burial under debris, and offsite doses from hypothetical accidents.

The licensee reviewed the site emergency plan, quality assurance program (QAP), training program, and radiation protection program, modified each program as appropriate, and determined the effectiveness of these programs is not decreased by ISFSI activities. In accordance with the Farley Nuclear Plant (FNP) QAP, FNP procedures have been developed or existing procedures modified to control activities associated with operation of the ISFSI. Although some enhancements to some procedures were made as a result of the dry run exercise, the team concluded that the procedures were of sufficient detail to safely accomplish dry cask storage activities.

The licensee evaluated the activities related to the storage of spent fuel in accordance with the provisions of 10 CFR 50.59, and determined that NRC approval was not required.

The licensee revised the FNP security program to provide protection of spent fuel against the threat of radiological sabotage in accordance with the provisions of 10 CFR 73.55.

The licensee controls and maintains as quality assurance records the current CoC and the documents referenced by the CoC. The licensee maintains the records provided by the cask supplier and will document any maintenance performed on ISFSI components in accordance with the FNP QAP. 10 CFR 72.212(b)(7) and (8) require that certain cask records be maintained until use of the cask is discontinued. Sections 11.0 and 12.0 of the draft Farley 10 CFR 72.212 Report state that such records will be maintained for the life of the reactor plant plus thirty years. The team concluded that this stated retention period will not assure the requirements of 10 CFR 212(b)(7) and (8) will be satisfied. Although the initial record retention period contained in the draft 10 CFR 72.212 report would require expiration of the initial license period for the cask plus NRC approval of a minimum of two renewal periods, the record retention period was modified to reflect "life of ISFSI."

The team reviewed the QA oversight of the ISFSI activities and found that no surveillance or audit report had been issued this year regarding ISFSI activities. A

special audit based on NRC Inspection Procedure 60854 was initiated March 28, however, the report of the audit results had not been issued as of 6/23/05. Draft audit documentation was made available to the inspector which appeared to reveal a comprehensive audit, and discussion with the lead auditor indicated that some improvement and corrective actions had been taken on issues identified during the audit. However, a timely audit report had not been issued that would allow Farley management to assess the adequacy and effectiveness of the audit, formally follow any associated corrective actions, and determine the readiness of the site to perform ISFSI activities.

3. Fuel Selection for Storage and Fuel Assembly Loading

a. Inspection Scope

The inspectors reviewed and discussed with Farley personnel the procedures related to characterization of spent fuel in the Farley Nuclear Plant, selection of fuel to be stored in the Holtec cask system, and the movement of fuel from the SFP to the MPC. The inspectors also reviewed licensee procedures relating to classification criteria for determining whether spent fuel was damaged or intact had been incorporated into procedures and was consistent with the criteria established by the NRC. Further, the inspectors observed licensee demonstration of fuel assembly loading into the MPC using a simulated fuel assembly.

b. Observations and Findings

On June 22, while observing the moving of a simulated (dummy) fuel assembly into the MPC, the team observed that the first attempt was not successful since the base of the dummy assembly was not able to clear the lip of the HI-TRAC. The operators observed this on the camera and correctly returned the assembly to its initial storage location. Subsequently, they exercised the fuel assembly handling tool and crane at different speeds. It was observed that the position that the dummy assembly stopped was higher at faster speeds. Loading of the dummy assembly into the MPC was again attempted, with the dummy assembly raised slowly until it cleared the storage rack and then at a faster rate until the crane reached the lift limit. The assembly cleared the HI-TRAC lip without any interference and was successfully loaded into the MPC. The team expressed concern that this setup posed a potential to damage a fuel assembly during actual fuel loading. Also, though the evolution was monitored by a submerged camera, the loading procedure did not require a verification to ensure sufficient clearance of each fuel assembly. The licensee initiated CR 2005106169 to strengthen the fuel loading procedure to ensure safe transfer of fuel to the MPC. The inspectors observed that licensee personnel exhibited appropriate caution when moving the dummy assembly to preclude contact with the top of the HI-TRAC.

4. 10 CFR 72.48 Requirements (IP 60857)

a. Inspection Scope

The inspectors reviewed several 10 CFR 72.48 screening evaluations to determine if Farley Nuclear Plant had performed acceptable 10 CFR 72.48 screening evaluations related to the design, construction, and operation of the Holtec cask, storage pad, and related ancillary equipment.

b. Observations and Findings

Inspectors held discussions with Farley personnel and reviewed a sample of licensee identified changes which were considered under the screening criteria related to 10 CFR 72.48, Changes, tests, and experiments.

The bulk of the 10 CFR 72.48 screening evaluations were performed as a result of having to develop new procedures covering the entire fuel loading and unloading operations; i.e., a new procedure is a change by definition, since there was no procedure in use prior to issuing the new procedure.

5. Welding Observations (IP 60853)

a. Inspection Scope

The inspectors observed welding and non-destructive examination (NDE) activities associated with the MPC lid to MPC shell, MPC Vent Cover Plate, and MPC Cover Plate Vent Plug welds. The observations included review of design welding requirements, a review of the welding procedure and its qualification records, and a review of welder qualification records. The inspectors verified that the welding activities were conducted to the applicable requirements of the 2001 Edition of ASME Section IX.

b. Observations and Findings

While reviewing the MPC Closure Welding Activities, the team identified that a required Liquid Penetrant Examination (PT) on the MPC Vent Cover Plate was not performed. In accordance with procedural requirements and the Certificate of Compliance, Table 3-1, a PT exam should have been performed after the root pass and after the final pass. No PT was performed after the root pass. In addition, the final PT examination was not adequately described in the licensee's procedure. The governing procedure should have specified a PT examination to be performed first on the MPC vent cover plate weld, and then a separate PT examination on the two vent plate plug welds. The licensee did not conduct these examinations separately, instead they performed the MPC vent cover plate PT and the PT on the plug welds at the same time. This final PT exam was completed with satisfactory results. The licensee has entered this issue in their corrective action program as CR 2005106250, and is currently revising the applicable procedure to prevent recurrence.

While reviewing the procedures for the MPC Closure Welding activities, the team identified a discrepancy between two licensee procedures. The general welding standard, FNP-0-SPP-GW-002, was revised to ensure that the cover plate vent plugs were removed prior to welding the cover plates on the MPC lid. This information was omitted from the actual welding procedure, FNP-0-MP-111.10, MPC Closure Welding and NDE/Inspection. The failure to ensure that the cover plate vent plugs were removed prior to welding could result in an unsatisfactory weld. The licensee promptly made the necessary revision to the procedure to include the applicable information, and reviewed both procedures in their entirety to ensure that there were no additional discrepancies. The licensee also entered this issue into their corrective action program as CR 2005106047.

6. Initial Cask Loading and Storage Observation

a. Inspection Scope

The inspectors observed portions of initial cask loading, drying, sealing, and moving in accordance with applicable procedures.

b. Observations and Findings

Overall, the licensee established and maintained adequate oversight for the dry cask storage evolution. Technical Specifications requirements and acceptance criteria as outlined in the FSAR for the Holtec casks were followed appropriately. Radiation protection controls were adequately established and implemented to reduce area and personnel doses and contamination. The loading campaign for the first cask was safely completed by the licensee.

Meetings, Including Exit

An inspection exit was held with the licensee on June 24 and an exit by telephone was conducted with the licensee on August 10 to discuss inspector observations. No proprietary information was received.

SUPPLEMENTAL INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Licensee Personnel

R. Johnson, Plant general Manager
T. Livingston, Chemistry Manager
H. Mahan, Licensing
E. Poole, Team Leader
T. McCallum, Special Projects
T. Sides, Licensing
S. Fulmer, Special Project Manager
P. Harcos, HP Manager

NRC

C. Patterson, Senior Resident Inspector
J. Baptist, Resident Inspector

INSPECTION PROCEDURES USED

60854	Preoperational Testing of an ISFSI
60855	Operations of an ISFSI
60856	Review of 10 CFR 72.212(b) Evaluations
60857	Review of 10 CFR 72.48 Evaluations
81001	ISFSI Security

ITEMS OPENED, CLOSED, AND DISCUSSED

None

Attachment

List of Documents Reviewed

Procedures as well as other references used by the inspectors:

FNP-0-NDE-100.5, Liquid Penetrant Examination (Color Contrast and Fluorescent)
FNP-0-SPP-WP-030, Specification for Welder Qualification For Pressure Boundary Applications
FNP-0-SPP-GW-002, General Welding Standard for Pressure Boundary Applications
FNP-0-MP-30.5, Spent Fuel Cask Crane - Operating Instructions, Version 11.0
FNP-0-MP-30.3, Spent Fuel Cask Crane Annual Mechanical Check, Version 10.0
FNP-0-MP-30.1, Spent Fuel Cask Crane Monthly Check, Revision 7
FNP-0-STP-643.0, Spent Fuel Cask Crane Cold Proof Test, Version 10.0
FNP-0-MP-113.4, MPC Closure Operations - NRC Dry Run Demonstrations, Version 4.0
FNP-0-MP-111.10, MPC Closure Welding and NDE/Inspection, Version 2.0
HPP-1027-320, Welding of MPC Closure Devices, Rev. 0
T-8:8-O-1, GTAW/Machine, Version 2.0
T-8:8-O-2, GTAW/Manual, Version 2.0
FNP-0-MP-112.3 MPC Cooldown and Weld Removal
FNP-0-MP-113.6 MPC Cooldown and Weld Removal – NRC Dry Run
FNP-0-CCP-656 Chemistry Sampling of the Multi-Purpose Canister (MPC)
FNP-0-STP-630.1 MPC Exit Gas Temperature (Unloading)
FNP-0-MP-111.7, Alternate Cooling Water System Operation
FNP-0-MP-111.3, MPC Fuel Loading Operations.
FNP-0-MP-112.1, DFS Equipment Malfunction Guidance
FNP-0-MP-113.2, HI-STORM System Preparation and Loading Operations
FNP-0-MP-113.3, HI-STORM Fuel Loading Operations
FNP-0-EIP-8.0, Emergency Plan Implementation Procedure
Technical Specifications related to ISFSI
FNP-0-STP-422.1 Boron Concentration Determination for the MPC
FNP-0-CCP-656 Chemistry Sampling of the MPC
FNP-0-ETP-4499 Spent Fuel Cask Loading Verification
FNP-0-MP-111.1 HI-STORM Site Transportation
FNP-0-MP-111.9 Cask Transporter Operation
FNP-0-MP-113.1 HI-STORM Site Transportation – NRC Dry Run
FNP-0-STP-822.0 HI-STORM Surface Dose Rate Surveillance
FNP-0-MP-111.2 HI-STORM System Preparation and Loading Operations
FNP-0-MP-113.2 HI-STORM System Prep - NRC Dry Run Demonstration
FNP-0-STP-820.0 HI-TRAC Contamination Survey
FNP-0-STP-821.0 HI-TRAC Average Surface Dose Rates
FNP-0-MP-111.4 MPC Closure Operations
FNP-0-MP-111.5 Vacuum Drying System Operation
FNP-0-MP-111.6 Helium Backfill Skid Operation
FNP-0-MP-113.4 MPC Closure Operations – NRC Dry Run Demonstration
FNP-0-STP-630.0 Vacuum Drying and Helium Backfill Surveillance Requirement
FNP-0-M23 Welding Manual
FNP-0-MP-112.2 HI-STORM System Unloading Operations
FNP-0-MP-113.5 HI-STORM System Unloading – NRC Dry Run
FNP-0-MP-110.0 Dry Fuel Storage Campaign Guidelines
FNP-0-MP-110.1 HI-STORM, MPC and HI-TRAC Storage and Pre-Use Inspections

FNP-0-MP-110.2 DFS Ancillary Equipment Lay-up and Pre-Use Preparations
FNP-0-MP-110.3 MPC Offloading and Upending
FNP-0-MP-110.4 MPC Receipt Inspection
FNP-0-MP-110.5 HI-STORM Receipt Inspection
FNP-0-MP-110.6 HI-TRAC Offloading and Upending
FNP-0-MP-110.7 HI-TRAC Annual Inspection and Maintenance
FNP-0-MP-110.8 Dry Fuel Storage Rigging Plan
FNP-0-MP-110.9 DFS Unloading Equipment Lay-Up and Pre-use Preparations
FNP-0-MP-110.10 Cask Transporter Maintenance
FNP-0-MP-110.11 HI-STORM In-Service Annual Inspection and Maintenance
FNP-0-MP-111.1 HI-STORM System Site Transportation
FNP-0-MP-111.2 HI-STORM System Preparation and Loading Operations
FNP-0-MP-111.3 MPC Fuel Loading Operations
FNP-0-MP-111.4 MPC Closure Operations
FNP-0-MP-111.5 Vacuum Drying System Operation
FNP-0-MP-111.6 Helium Backfill System Operation
FNP-0-MP-111.7 Alternate Cooling Water Operation
FNP-0-MP-111.8 Chilled Water System Operation
FNP-0-MP-111.9 Cask Transporter Operation
FNP-0-MP-111.10 MPC Closure Welding and NDE/Inspections
FNP-0-MP-112.1 DFS Equipment Malfunction Guidance
FNP-0-MP-112.2 HI-STORM System Unloading Operations
FNP-0-MP-112.3 MPC Cooldown and Weld Removal
FNP-0-MP-113.1 HI-STORM System Site Transportation - NRC Dry Run
FNP-0-MP-113.2 HI-STORM System Prep and Loading Operations - NRC Dry Run
FNP-0-MP-113.3 MPC Fuel Loading Operations - NRC Dry Run Demonstration
FNP-0-MP-113.4 MPC Closure Operations - NRC Dry Run Demonstration
FNP-0-MP-113.5 HI-STORM System Unloading Operations- NRC Dry Run
FNP-0-MP-113.6 MPC Cooldown and Weld Removal- NRC Dry Run Demonstration
List of Dry Storage and Supporting Procedures
FNP-0-STP-107 SFP Fuel Assembly Storage Verification
FNP-0-STP-422.1 Boron Determination for the MPC
FNP-0-STP-630.0 MPC Vacuum Drying and Helium Backfill
FNP-0-STP-630.1 MPC Exit Gas Temperature (Unloading)
FNP-0-STP-820.0 HI-TRAC Contamination Survey
FNP-0-STP-821.0 HI-TRAC Average Surface Dose Rates
FNP-0-STP-822.0 HI-STORM Average Surface Dose Rates
FNP-0-AOP-21 Abnormal Operating Procedure – Severe Weather
FNP-0-AOP-29 Abnormal Operating Procedure – Plant Fire
FNP-0-CCP-656 Chemistry Sampling of the Multi-Purpose Canister (MPC)
FNP-0-ETP-4499 Spent Fuel Cask Loading Verification
FNP-0-M6 FNP Rigging Manual
FNP-0-M23 FNP Welding Manual
FNP-0-MP-30.5 Cask Crane Operating Procedure
FNP-0-RCP-1 Schedule, Health Physics Group Activities
FNP-1-STP-1 Operations Daily and Shiftly Surveillance Requirements