

UNITED STATES NUCLEAR REGULATORY COMMISSION REGION I 475 ALLENDALE ROAD KING OF PRUSSIA, PENNSYLVANIA 19406-1415

December 21, 2005

License Nos. DPR-59

Docket Nos. 05000333 07200012

Mr. Theodore Sullivan Site Vice President Entergy Nuclear Northeast James A. FitzPatrick Nuclear Power Plant Post Office Box 110 Lycoming, NY 13093

SUBJECT: JAMES A. FITZPATRICK NUCLEAR POWER PLANT - NRC INTEGRATED INSPECTIONS 05000333/2005012 AND 07200012/2005012

Dear Mr. Sullivan:

On November 14-17, 2005, Robert Prince and Suresh Chaudhary of this office completed an inspection of Independent Spent Fuel Storage Installation (ISFSI) activities. The inspection covered aspects associated with the preparation, movement and placement of spent fuel into the ISFSI facility. The findings of the inspection were discussed with you and members of your staff on November 17, 2005. The enclosed report presents the results of that inspection.

Based on the results of this inspection, no findings of significance were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room of from the Publically Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC web site at http://www/nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

No reply to this letter is required. We appreciated your cooperation with us during this inspection.

Sincerely,

/RA/

Marie Miller, Chief Decommissioning Branch Division of Nuclear Materials Safety T. Sullivan

cc w/encl:

- G. Taylor, CEO, Entergy Operations
- M. Kansler, President, Entergy
- J. Herron, Sr, VP and Chief Operating Officer
- C. Schwarz, VP, Operations Support
- K. Mulligan, General Manager, Plant Operations
- O. Limpias, VP, Engineering
- J. McCann, Director, Licensing
- C. Faison, Manager, Licensing
- M. Colomb, Director of Oversight
- D. Wallace, Director, Nuclear Safety Assurance
- R. Plasse, Acting Manager, Regulatory Compliance
- T. McCullough, Assistant General Counsel
- P. Smith, President, New York State Energy Research and Development Authority
- P. Eddy, New York State Department of Public Service
- S. Lyman, Oswego County Administrator

Supervisor, Town of Scriba

C. Donaldson, Esquire, Assistant Attorney General, New York Department of Law

- J. Sniezek, PWR SRC Consultant
- M. Lyster, PWR SRC Consultant
- S. Lousteau, Treasury Department

INPO

State of New York

T. Sullivan

cc w/encl:

- G. Taylor, CEO, Entergy Operations
- M. Kansler, President, Entergy
- J. Herron, Sr, VP and Chief Operating Officer
- C. Schwarz, VP, Operations Support
- K. Mulligan, General Manager, Plant Operations
- O. Limpias, VP, Engineering
- J. McCann, Director, Licensing
- C. Faison, Manager, Licensing
- M. Colomb, Director of Oversight
- D. Wallace, Director, Nuclear Safety Assurance
- R. Plasse, Acting Manager, Regulatory Compliance
- T. McCullough, Assistant General Counsel
- P. Smith, President, New York State Energy Research and Development Authority
- P. Eddy, New York State Department of Public Service
- S. Lyman, Oswego County Administrator
- Supervisor, Town of Scriba
- C. Donaldson, Esquire, Assistant Attorney General, New York Department of Law
- J. Sniezek, PWR SRC Consultant
- M. Lyster, PWR SRC Consultant
- S. Lousteau, Treasury Department

INPO

State of New York

Distribution w/encl: (VIA E-MAIL)

- S. Collins, RA
- M. Dapas, DRA
- B. McDermott, DRP
- D. Jackson, DRP
- S. Lee, RI OEDO
- R. Laufer, NRR
- J. Boska, PM NRR
- P. Milano, PM (backup)
- L. Cline, DRP NRC Senior Resident Inspector
- D. Dempsey, DRP, Resident Inspector
- K. Kolek, Resident OA

Region I Docket Room (with concurrences)

ROPreports@nrc.gov

DOCUMENT NAME: E:\Filenet\ML053570183.wpd

SISP Review Complete: RPrince

After declaring this document "An Official Agency Record" it will be released to the Public.

To receive a copy of this document, indicate in the box. C - Copy w/o allach/enci E - Copy w/ allach/enci N - No copy

OFFICE	DNMS/RI	Ν	DNMS/RI	DNMS/RI		
NAME	RPrince		SChaudhary	MMiller		
DATE	12/21/05		12/21/05	12/21/05		

OFFICIAL RECORD COPY

U.S. NUCLEAR REGULATORY COMMISSION REGION I

INSPECTION REPORT

Docket No.	50333 and 72-12
License No.	DPR-59
Report No.	05000333/2005012 and 07200012/2005012
Licensee:	Entergy Nuclear Northeast
Facility:	James A FitzPatrick Nuclear Power Plant
Location:	P.O. Box 110 Lycoming, NY 13093
Dates:	November 14-17, 2005

	/RA/	12/21/05
Inspectors:	Robert Prince Health Physicist	date
	/RA/	12/21/05
	Suresh Chaudhary Senior Health Physicist	date
Approved By:	/RA/	12/21/05
, pprotod Dy.	Marie Miller, Chief Decommissioning Branch Division of Nuclear Materials Safety	date

EXECUTIVE SUMMARY

Entergy Nuclear Northeast NRC Inspection Report No. 05000333/2005012 and 07200012/2005012

This inspection consisted of evaluating Independent Spent Fuel Storage Installation (ISFSI)related activities including procedures and documentation, characterization of selected fuel assemblies for storage, handling and lifting of heavy loads, multipurpose canister (MPC) loading and sealing, and review of personnel training and qualifications associated with the most recent fuel loading campaign. The inspection included field observations, interviews with cognizant personnel and review of licensee documentation.

The licensee had developed a cask loading plan in accordance with approved procedures. Licensee documentation supported the proper characterization of the fuel assemblies loaded into MPC-161 and fuel assembly parameters were in compliance with Certificate of Compliance (CoC) specifications.

Revisions made to the 72.212 report were properly documented and reviewed to ensure compliance with the requirements of 10 CFR 72 Subpart K. Changes to the 72.212 Report and 72.48 evaluations were performed, reviewed, and documented in accordance with approved procedures.

Licensee and contractor personnel demonstrated the ability to adequately weld and perform nondestructive examination (NDE) activities. Welding activities associated with MPC closure were performed in accordance with approved procedures. Work activities were closely monitored and work documents properly completed as work progressed. Personnel that performed welding and NDE activities were qualified to perform their assigned functions.

The lifting and movement of heavy loads were performed in accordance with approved procedures. Work evolutions associated with the movement of heavy loads were controlled and performed in a safe manner. Routine maintenance and inspections of the reactor building crane were properly performed and documented in accordance with approved procedures.

The licensee demonstrated the capability to perform drain-down, vacuum drying, and helium backfilling of an MPC in compliance with Technical Specifications requirements. Procedures and processes were adequate to ensure minimal water content of loaded MPCs, and that an inert atmosphere was obtained to support the safe storage of spent fuel assemblies.

The Quality Assurance (QA) Group provided effective oversight of ISFSI activities. The identification and tracking of issues were implemented in accordance with the licensee's corrective action program.

The licensee implemented an effective program to identify personnel training requirements associated with the ISFSI program. Appropriate training modules were developed for the various tasks. Individuals were properly trained and qualified to perform their assigned functions.

The identification, tracking and resolution of issues was implemented in accordance with the licensee's corrective action program. The threshold for identifying safety-related issues related to ISFSI activities was at a sufficiently low threshold to allow early identification and resolution of adverse trends.

Appropriate radiological controls were implemented in support of ISFSI activities. Storage casks placed in the ISFSI were in compliance with radiological conditions specified in Technical Specifications. As low as reasonably achievable (ALARA) efforts were adequate and established dose goals were developed based on previous operating history and site-specific experience.

REPORT DETAILS

I. Fuel Characterization and Verification

a. Inspection Scope

The CoC for the Holtec International dry cask storage system specifies the parameters that must be met in order to allow spent fuel to be stored at the ISFSI. The inspector evaluated licensee programs to verify that spent fuel assemblies selected for storage met the applicable requirements of the CoC. The inspection consisted of interviews with cognizant personnel, field observations, and review of supporting documentation.

The inspector reviewed the licensee's process for selecting and verifying fuel assemblies for placement into an MPC. The inspector reviewed various documents associated with the qualification, characterization, and selection of fuel assemblies for storage at the ISFSI.

b. Observations and Findings

Technical Specifications require that fuel assemblies selected for loading be visually inspected, independently verified, be free of cladding defects, and be within specified limits for such parameters as fuel enrichment, burn-up, and decay heat output. The inspector discussed the fuel selection process with cognizant personnel and determined that individuals were knowledgeable of the Technical Specifications requirements. The inspector observed loading of spent fuel assemblies into MPC number 161. Independent verification of the selected fuel assemblies was performed as fuel was loaded into the MPC in the spent fuel pool. The inspector reviewed the as-loaded fuel movement worksheets to verify that assemblies were loaded in the designated MPC cell location. The inspector noted that the selected fuel assemblies met appropriate Technical Specifications requirements for placement into an MPC for dry storage. Supporting documentation adequately characterized the selected fuel assemblies for loading into MPC-161.

c. <u>Conclusions</u>

The licensee had developed a cask loading plan in accordance with approved procedures. Licensee documentation supported the proper characterization of the fuel assemblies loaded into MPC-161 and fuel assembly parameters were in compliance with CoC specifications.

II. Review of Evaluations

a. Inspection Scope

The inspector evaluated the licensee's compliance with the requirements of 10 CFR 72.212 and 10 CFR 72.48. The inspection consisted of interviews with

cognizant personnel and review of licensee documentation. The inspector reviewed the revisions made to the 72.212 report and the one 72.48 evaluation that was issued.

b. <u>Observations and Findings</u>

Since the last ISFSI inspection the licensee issued revisions 1 through 4 of the 10 CFR 72.212 Evaluation Report. Revision 1 was made in support of Amendment 1 of CoC 1014, while Revision 3 was made to support Amendment 2 of the CoC. Revisions 2 and 4 incorporated additional references associated with evaluations to support the helium backfill density calculations for MPC-010, MPC-014, and MPC-015. A 72.48 evaluation was performed in conjunction with Revision 2 of the 72.212 report pertaining to helium backfill density calculations. This item is discussed in further detail in Section VIII of this report.

In addition to the changes noted above for the 72.212 report other minor changes that were administrative in nature were also included as part of the various revisions. These revisions were made in accordance with the provisions of 10 CFR 72. No issues associated with the 72.212 report revisions were identified.

c. <u>Conclusions</u>

Revisions made to the 72.212 report were properly documented and reviewed to ensure compliance with the requirements of 10 CFR 72 Subpart K. Changes to the 72.212 Report and 72.48 evaluations were performed, reviewed, and documented in accordance with approved procedures.

III. Welding and Nondestructive Testing

a. Inspection Scope

The inspector observed and evaluated welding and NDE activities associated with closure of MPCs to determine if licensee and contractor staff were qualified in the appropriate welding techniques and the performance of NDE on the type of MPC used for storage at the FitzPatrick site. The inspection consisted of field observations, interviews with cognizant personnel, and review of supporting documentation. The inspector observed welding activities in the field and discussed specific aspects of field work with contractor personnel performing the activity. Welding procedures utilized for ISFSI work were reviewed along with selected welder qualification records. Selected records, including penetrant testing (PT) and NDE data sheets, were reviewed for MPCs that were previously loaded during the current fuel campaign.

b. Observations and Findings

The licensee utilized the services of an experienced contractor specialized in welding and NDE techniques for the MPC type used by the licensee. Contractor personnel had performed similar services for other licensees, including welding and NDE on this MPC design. Qualified licensee personnel performed NDE activities associated with welding

and closure of MPCs. Close communication was maintained between contractor and licensee personnel during the performance of welding activities. While welding was in progress the inspector noted the presence of contractor supervisory personnel in the filed monitoring work. Contractor and licensee personnel were knowledgeable of the welding techniques employed, operation of the welding machine, and performed activities in accordance with approved procedures.

The inspector observed the welding of a cover plate for MPC-161 and associated surface examinations of the final weld. The inspector discussed test results with cognizant personnel and observed testing activities in the field. No recordable indications were detected in the weld. No concerns or issues were identified.

c. Conclusions

Licensee and contractor personnel demonstrated the ability to adequately weld and perform NDE activities. Welding activities associated with MPC closure were performed in accordance with approved procedures. Work activities were closely monitored and work documents properly completed as work progressed. Personnel that performed welding and NDE activities were qualified to perform their assigned functions.

IV. Heavy Loads Program

a. Inspection Scope

The inspector evaluated the licensee's heavy loads program to verify the adequacy of the program to ensure safe handling of heavy loads and that personnel were appropriately qualified. The inspection consisted of field observations, interviews with cognizant personnel, and review of supporting documentation. The inspector reviewed the licensees program associated with the inspection and maintenance of the reactor building crane utilized for ISFSI activities. The inspector reviewed the most recent annual and monthly inspections performed for the reactor building crane.

b. Observations and Findings

The work package for the reactor building crane inspections was comprehensive and inspection activities completed in accordance with authorized work documents. Inspection results for both the annual and monthly inspections met appropriate acceptance criteria. No issues or concerns were noted with the operation or maintenance of the reactor building crane.

To ensure that the reactor building crane cannot travel over areas of the SFP while carrying a heavy load, the licensee has designated restricted load paths. Limit switches prevent the reactor building trolley from traveling outside the boundaries of the safe load path when handling heavy loads. Licensee personnel stated that the limit switches are tested periodically to ensure proper limitation of trolley movement.

The inspector observed a pre-job briefing prior to movement of the MPC and transfer cask from the spent fuel pool to the cask preparation area. The briefing adequately addressed the controls associated with the movement and handling of the heavy load and pertinent procedural aspects controlling the task. Individual responsibilities were clearly communicated during the pre-job briefing. Crane operators, spotters, and members of the lifting team were knowledgeable of their responsibilities. The responsibile supervisor emphasized the safety aspects of the activity and the responsibility of individuals to stop the job in the event of a safety issue. Movement of the cask from the spent fuel pool to the cask preparation area was performed in a deliberate and safe manner. The inspector noted that effective communication was maintained between the load director, crane operator, and members of the lifting team while lifts were in progress.

c. Conclusions

The lifting and movement of heavy loads were performed in accordance with approved procedures. Work evolutions associated with the movement of heavy loads were controlled and performed in a safe manner. Routine maintenance and inspections of the reactor building crane were properly performed and documented in accordance with approved procedures.

V. Vacuum Drying and Helium Backfill Operations

a. Inspection Scope

The licensee is required to drain the MPC, vacuum dry the MPC, and backfill the canister with helium to meet Technical Specifications requirements. The inspection consisted of field observations, interviews with cognizant personnel, and review of supporting documentation. The inspector reviewed licensee procedures associated with vacuum drying and helium backfilling operations. The vacuum drying and helium backfill data sheets for MPC-159 and MPC-160, that were previously loaded during the current fuel campaign, were reviewed.

b. Observations and Findings

Procedures contained the necessary details and precautions to ensure that vacuum drying and helium backfill operations were performed in a manner to ensure compliance with applicable Technical Specifications limits. The inspector noted that appropriate vacuum conditions were achieved and that appropriate values for final residual helium pressure were specified to ensure that proper helium conditions were achieved for the two storage canisters.

The inspector noted that the vacuum drying skid and associated equipment was operable and in good material condition. Cognizant individuals were knowledgeable of the applicable Technical Specifications requirements associated with vacuum drying and helium backfilling of an MPC.

c. Conclusions

The licensee demonstrated the capability to perform drain-down, vacuum drying, and helium backfilling of an MPC in compliance with Technical Specifications requirements. Procedures and processes were adequate to ensure minimal water content of loaded MPCs, and that an inert atmosphere was obtained to support the safe storage of spent fuel assemblies.

VI. Quality Assurance Program

a. Inspection Scope

The involvement and role of the QA Group associated with ISFSI activities was evaluated. The scope of the inspection was to verify adequate independent involvement by the stations' QA department in the monitoring of ISFSI activities. The inspection consisted of interviews with cognizant personnel and review of licensee documentation. The inspector interviewed a QA auditor responsible for the performance of ISFSI-related QA surveillances.

b. Observations and Findings

The QA auditor provided an overview of QA activities associated with ISFSI operations. The auditor was knowledgeable of key ISFSI tasks and had selected appropriate functions to review during the current campaign. Field observations covered such activities as pre-job briefings, helium backfill operations, vacuum drying, and handling and transport of MPCs. Several QA field observations and a QA Surveillance Report had been performed during the current fuel campaign. The inspector confirmed that deficiencies identified in the Surveillance Report were entered into the licensee's corrective action program for resolution.

c. <u>Conclusions</u>

The QA Group provided effective oversight of ISFSI activities. The identification and tracking of issues were implemented in accordance with the licensee's corrective action program.

VII. Training and Qualifications

a. <u>Inspection Scope</u>

The licensee's training program was reviewed to verify that appropriate training requirements were identified for ISFSI-related tasks and that personnel were qualified to perform ISFSI-related activities. The licensee's training program was reviewed to verify that the required elements described in 10 CFR 72 Subpart I were incorporated into the ISFSI training program. The inspection consisted of interviews with cognizant personnel, field observations and review of training records. The inspector interviewed

the Training Program Administrator responsible for the ISFSI training program. The inspector reviewed the various ISFSI-related training modules. The inspector reviewed selected training attendance sheets. The inspector reviewed respiratory qualification records and the details of the associated medical exam for authorized crane operators.

b. <u>Observations and Findings</u>

The Training Program Administrator explained the various training modules associated with ISFSI activities and the related training requirements. The licensee relied on contractor personnel to perform many of the ISFSI functions during the initial fuel campaign in 2002. ISFSI activities for the current fuel campaign were performed primarily by licensee personnel. Prior to the start of the 2005 fuel campaign training was provided to individuals assigned to the ISFSI project. The inspector noted that training modules were comprehensive and covered pertinent CoC and Technical Specifications requirements, applicable to the dry cask storage system used at FitzPatrick. The licensee developed a student qualification matrix that designated individuals qualified to perform a given task based upon successful completion of the required training modules. The inspector confirmed that selected personnel had received the required training prior to performing ISFSI tasks. No issues or concerns were identified.

c. <u>Conclusions</u>

The licensee implemented an effective program to identify personnel training requirements associated with the ISFSI program. Appropriate training modules were developed for the various tasks. Individuals were properly trained and qualified to perform their assigned functions.

VIII. Condition Reports

a. Inspection Scope

The use of the condition reporting program in support of ISFSI activities was evaluated. The inspection consisted of interviews with cognizant personnel and review of supporting documentation. The inspector reviewed the condition reports (CR) issued by the licensee pertaining to the current fuel campaign. Selected CRs were reviewed to evaluate the licensee's effectiveness in identifying appropriate corrective actions and the implementation of those corrective actions.

b. <u>Observations and Findings</u>

The threshold for identification of issues was noted to be at a level that provides early identification of adverse trends. The inspector noted that action items were identified and being tracked to closure utilizing the formal CR process. The inspector discussed the tracking, current status, and closure of selected corrective actions with cognizant personnel.

During the preparation for the current ISFSI campaign the licensee discovered an error in the helium backfill calculation previously used in the filling of MPC's-010, 014, and 015. Upon discovery of this condition, the licensee notified the Resident Inspector and the Region I ISFSI Coordinator. Condition Report 2005-03483 was issued on 8/18/05 to address this issue. The licensee performed a 72.48 evaluation which adequately addressed this situation. The helium concentrations in MPCs-014 and 015 were marginally outside Technical Specifications limits. Technical Specifications for Revision 0 of the HI-STORM System CoC require a minimum MPC helium concentration of 0.10962 gram-moles per liter. The helium concentrations for MPCs-014 and 015 were discovered to be 0.1089 and 0.1093 gram-moles per liter based on the calculation methodology previously used. The presence of helium inside the MPC serves to provide a heat transfer mechanism to maintain the temperature of MPCs stored in the ISFSI within allowable limits. The licensee performs daily checks of MPC temperature levels on stored MPCs. Prior to the onsite inspection the inspector discussed the results of these surveillances with cognizant personnel. The MPCs in guestion were placed in the ISFSI in 2002 and their temperature readings have been in compliance with Technical Specifications limits. Furthermore, no adverse temperature trends have been observed. The inspector reviewed evaluations performed by the manufacturer of the dry storage cask design used by the licensee to address the lower helium concentrations. The vendor evaluation indicated that the ability of the stored MPCs to meet design requirements was not compromised.

The licensee evaluated the original calculation methodology utilized to determine helium concentrations in filled MPCs. Based on discussions the licensee had with vendor personnel it was determined that various methods may be used for determining the helium concentration in an MPC. The original methodology for calculating helium density utilized the "Beattie Bridgeman" equation. The licensee subsequently used a calculation methodology (i.e., "McCarty") recognized to be more accurate for calculating helium density. The licensee re-calculated the helium concentrations for the previously loaded MPCs using the "McCarty" method and determined that the helium concentrations for MPC-014 and MPC-015 met the limits specified by Technical Specifications. The inspector noted that licensing basis documents did not specify a specific method to be utilized when calculating helium concentrations. The inspector confirmed that either methodology was acceptable for the determination of helium concentration. Based on this information the inspector concluded that there was no impact on the health and safety of the public.

Licensee personnel stated that upon completion of the current fuel campaign that an overall review of CRs and lessons-learned would be performed to identify any adverse trends or areas for improvement prior to the next ISFSI campaign. No issues or safety concerns were identified.

c. <u>Conclusions</u>

The identification, tracking, and resolution of issues was implemented in accordance with the licensee's corrective action program. The threshold for identifying safety-

related issues related to ISFSI activities was at a sufficiently low threshold to allow early identification and resolution of adverse trends.

IX. Radiation Protection

a. <u>Inspection Scope</u>

The inspector reviewed the licensee's programs and processes for controlling radiological activities related to ISFSI operations. The inspection consisted of field observations, interviews with cognizant personnel, and review of supporting documentation. The inspector discussed the radiological safety precautions and controls established for ISFSI activities with cognizant personnel. The inspector reviewed selected radiological survey data sheets for MPCs loaded during the current fuel campaign. The inspector observed radiological postings and access controls at the ISFSI facility.

b. Observations and Findings

A detailed ALARA plan with dose estimates was developed that was comprehensive and established dose goals for key ISFSI tasks. The inspector observed licensee personnel as they performed radiological surveys of a loaded MPC as it was removed from the spent fuel pool and transferred to the cask preparation area. Surveys were performed in accordance with approved procedures. The inspector noted close communication between radiation protection personnel and members of the work crew during various stages of ISFSI operations. Changing radiological conditions were communicated to members of the work crew in a timely manner. Appropriate procedures specified acceptable dose rate values for loaded MPCs to ensure compliance with Technical Specifications dose rate limits for casks to be placed in the ISFSI. The inspector noted that radiation and contamination survey results met Technical Specifications criteria for the storage of loaded casks at the ISFSI facility. No safety concerns were identified.

The inspector noted that the licensee has several thermoluminescent dosimetry (TLD) monitoring stations placed along the perimeter fencing of the ISFSI facility. The ISFSI and the perimeter fencing are located inside the Protected Area. The inspector reviewed the TLD monitoring results for the ISFSI perimeter fencing for the first three quarters of 2005. No safety concerns were identified.

The nearest controlled area boundary location, accessible to a member of the public, is in excess of a 1000 feet from the ISFSI. Based on TLD monitoring data, doses to members of the public due to the operation of the ISFSI facility, have been maintained well below regulatory limits and are essentially indistinguishable from background radiation levels.

c. <u>Conclusions</u>

Appropriate radiological controls were implemented in support of ISFSI activities. Storage casks placed in the ISFSI were in compliance with radiological conditions specified in Technical Specifications. ALARA efforts were adequate and established dose goals were developed based on previous operating history and site-specific experience.

X. Exit Meeting

The inspector presented inspection results to you and members of your staff during an exit meeting on November 17, 2005. The licensee acknowledged the findings presented by the inspector.

ATTACHMENT 1

SUPPLEMENTAL INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Licensee

Marsha Anderson, Health Physics Supervisor *Sherard Anderson, ISFSI Project Coordinator *Jeff Boyer, Modification Supervisor-Maintenance *Gordie Brownell, Regulatory Compliance Specialist Paul Caplette, ALARA Specialist *Jim Costedio, Regulatory Compliance Manager *Pete Cullinan, HU Manager *Mark Dooley, Supervisor, Mechanical Maintenance *Brian Drain, Manager, Project Management Bill Drews, Superintendent, Reactor Engineering Marty Enwright, Mechanical Maintenance Training Program Administrator *Barrie Gorman, Chemistry Supervisor *Doug Howe, Acting Quality Assurance Manager *G.J. Keeler, Chief Mechanic *Scott McCall, Central Planning Superintendent *Tom Moskalyk, Design Engineer-ISFSI *Kevin Mulligan, General Manager Tom Pelton, QA Auditor *Rick Plasse, NRR Project Manager, Licensing Bob Post, Reactor Engineer *Ellen Quinn, System Engineer Rex Stark, Engineer, PT-Level II *Ted Sullivan, Site Vice President *Rob Tonkin, Maintenance Support Superintendent *Art Zaremba, Planning, Scheduling, Outage Manager

*Denotes those present at the exit meeting.

LIST OF DOCUMENTS REVIEWED

Procedure RAP-7.2.07, Fuel Selection for Dry Cask Storage, Rev 4, Dated 10/13/05

Engineering Report JAF-RPT-MISC-04364, Fuel Characterization for Storage in the ISFSI

Engineering Report JAF-RPT-MISC-04275, Discharged Fuel Bundle Operating History, Cycles 1-14

Fuel Movement Worksheets, RAP-7.1.05C for MPC

10 CFR 72.48 Evaluation No. JAF-ISFSI-01-001, JAF Modified HI-STORM Overpack

Procedure ENN-LI-112, 10 CFR 72.48 Review Program, Rev 0, Dated 12/2/03

Engineering Report No. JAF-RPT-SFS-04329, Rev 1, Independent Spent Fuel Storage Installation 10 CFR 72.212 Evaluation Report, Dated 8/18/05

Engineering Report No. JAF-RPT-SFS-04329, Rev 2, Independent Spent Fuel Storage Installation 10 CFR 72.212 Evaluation Report, Dated 8/30/05

Engineering Report No. JAF-RPT-SFS-04329, Rev 3, Independent Spent Fuel Storage Installation 10 CFR 72.212 Evaluation Report, Dated 10/17/05

Engineering Report No. JAF-RPT-SFS-04329, Rev 4, Independent Spent Fuel Storage Installation 10 CFR 72.212 Evaluation Report, Dated 11/7/05

Liquid Penetrant Examination Report N0. 05S120, MPC Shell S/N 0161

Work Order No. JF-030734900, Annual Inspection of Reactor Building Crane

Work Order No. JF-030742400, Monthly Inspection of Reactor Building Crane

Procedure MP-088.02, Reactor Building Crane Inspection 88CR2, Rev 15, Dated 1/27/05

Task Qualifications - Task #: 809007, Operate Overhead Cranes

Procedure MP-019.06, MPC Loading and Sealing, Rev 08, Dated 11/3/05

Helium Backfill Calculation, MP-019.06, MPC-159, performed on 10-21-05

Helium Backfill Calculation, MP-019.06, MPC-160, performed on 11-03-05

Vacuum Drying Work Package pages from MP-019.06, MPC-159, performed on 10-21-05

Vacuum Drying Work Package pages from MP-019.06, MPC-160, performed on 11-03-05

Quality Assurance Surveillance Report, SR No. QS-2005-JAF-015, ISFSI Cask Loading and Maintenance Activities, Dated June 1, 2005

Dry Cask Storage Training Module MT-4825.01, Rev 3, HI-STORM Operations Training, Dated 4/28/05

Dry Cask Storage Training Module MT-4825.02, Rev 2, Multipurpose Canister Sealing Operations, Dated 4/28/05

Mechanical Maintenance Training Module JLC-MMCT-ISFSI, Rec 00, ISFSI Lab Exercise, Dated 4/14/05

Dry Cask Storage Training Module LP-OPS-19-1, Rev 3, Operations Overview Training, Dated 4/14/05

ALARA Review No. 05-020, Dry Fuel Storage

ALARA Review No. 02-042, Dry Cask Storage - ALARA Review Closeout Summary

LIST OF ACRONYMS

- ALARA As Low As Reasonably Achievable
- CFR Code of Federal Regulations
- CoC Certificate of Compliance
- CR Condition Report
- ISFSI Independent Spent Fuel Storage Installation
- MPC Multipurpose Canister
- NDE Nondestructive Examination
- PARS Publically Available Records
- PT Penetrant Test
- QA Quality Assurance
- TLD Thermoluminescent Dosimeter