



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-4005

May 19, 2005

Ms. Elizabeth D. Sellers, Manager
U.S. Department of Energy
Idaho Operations Office
1955 Fremont Avenue
Idaho Falls, ID 83401-1563

SUBJECT: NRC INSPECTION REPORT 72-20/05-01

Dear Ms. Sellers:

A routine inspection of storage operations was conducted April 25-27, 2005, at your Three Mile Island Unit 2 (TMI-2) Independent Spent Fuel Storage Installation (ISFSI). At the conclusion of the inspection on April 27, 2005, an exit briefing was conducted with Mr. Mark Gardner and other members of your staff. The enclosed report presents the scope and results of that inspection.

The inspection was an examination of activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection included reviews of radiation safety, ISFSI operations, quality assurance, corrective action program, records and the safety review program. No violations of NRC regulations were identified during the inspection.

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

Should you have any questions concerning this inspection, please contact the undersigned at (817) 860-8191 or Mr. Ray Kellar at (817) 860-8164.

Sincerely,

/RA/

D. Blair Spitzberg, Ph.D., Chief
Fuel Cycle and Decommissioning Branch

Docket No.: 72-20
License No.: SNM-2508

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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket No.: 72-20
License No.: SNM-2508
Report No.: 72-20/05-01
Licensee: United States Department of Energy
Facility: TMI-2 Independent Spent Fuel Storage Installation
Location: Idaho Operations Office
1955 Fremont Avenue
Idaho Falls, Idaho 83401
Dates: April 25-27, 2005
Inspectors: Ray L. Kellar, P.E., Health Physicist
Scott P. Atwater, Health Physicist
Approved By: D. Blair Spitzberg, Ph.D., Chief
Fuel Cycle & Decommissioning Branch, Region IV
Attachments: Supplemental Inspection Information

EXECUTIVE SUMMARY

United States Department of Energy
NRC Inspection Report 72-20/05-01

The U. S. Department of Energy-Idaho Operations (DOE-ID) is licensed by the U. S. Nuclear Regulatory Commission (NRC) to operate the TMI-2 Independent Spent Fuel Storage Installation (ISFSI) located at the Idaho National Engineering and Environmental Laboratory (INEEL) site. DOE-ID continues to demonstrate the capability to maintain and operate the facility in compliance with NRC regulations and license requirements. The facility was found to be well maintained. Personnel assigned management responsibilities and quality assurance responsibilities for the ISFSI continue to demonstrate a commitment to maintaining the facility in compliance with NRC regulations.

Operation of an ISFSI (60855, 83728, 40801)

- The radiological environmental monitoring reports from 2003 and 2004 documented that radiological conditions had not changed at the ISFSI from previously reported levels and were consistent with pre-operational baseline values. (Section 1.2.a)
- The ISFSI collective radiation exposure to workers had continued to improve over time from a peak of 0.234 person-rem in 2001 to the current 0.010 person-rem in 2004. (Section 1.2.a)
- A program for control of occupational radiation exposure, also known as maintaining occupation dose As Low As Reasonably Achievable (ALARA), had been implemented at the ISFSI. Procedural controls were present to provide adequate oversight of potential high occupational radiation exposure evolutions. (Section 1.2.a)
- ISFSI operational activities reviewed met technical specification requirements and were conducted in accordance with site procedures. Selected training records for ISFSI personnel were current and complete. (Section 1.2.b)
- The ISFSI pad area and Horizontal Storage Modules (HSM) were well maintained. The small amount of combustibles present at the ISFSI had been evaluated by the site and found not to impact any Important-to-Safety related equipment. Radiological warnings were properly posted at the ISFSI. (Section 1.2.b)
- DOE had notified the NRC of plans to replace the existing Maintenance & Operations (M&O) contractor for the ISFSI. This is part of the normal process by DOE to periodically re-bid the site contract. The transition to the new M&O contractor should have minimal impact on the ISFSI operations. (Section 1.2.b)
- No changes had been made to the ISFSI quality assurance manual since the last inspection. Annual audits of the ISFSI and selected surveillances had been performed by the QA organization. Deficiencies discovered during the audits and surveillances had

been entered into DOE's corrective action system. No issues or concerns were identified with the QA program and its implementation. (Section 1.2.c)

- The corrective action program implementing procedure and selected deficiency reports generated since the last inspection were reviewed. Corrective actions taken by the licensee were appropriate. No issues or concerns were identified with the corrective action program and its implementation. (Section 1.2.d)

Review of 10 CFR 72.48 Evaluations (60857)

- The safety review program was reviewed, including the safety review procedure and selected responsibilities of the Safety Review Committee. One safety evaluation and selected screenings conducted since the last NRC inspection were reviewed and found to meet regulatory requirements. No issues or concerns were identified with the safety review program and its implementation. (Section 2.2)

Followup (92701)

- Inspection Followup Item (IFI) 72-20/0301-01 associated with long-term storage of ISFSI records has been closed in this inspection report. Site procedures were revised to adequately define requirements for temporary and long-term record storage. (Section 3)

Report Details

Summary of Facility Status

The Three Mile Island Unit 2 (TMI-2) Independent Spent Fuel Storage Installation (ISFSI) was located within the security perimeter of the Idaho Nuclear Technology and Engineering Center (INTEC) at the Idaho National Engineering and Environmental Laboratory (INEEL) site. The storage system used at the TMI-2 ISFSI was the NUHOMS® -12T cask system. A license was issued to the Department of Energy-Idaho Operations Office (DOE) by the U. S. Nuclear Regulatory Commission (NRC) on March 19, 1999. On March 31, 1999, the first dry shielded canister (DSC) containing TMI-2 core debris was moved from the test area north facility to the ISFSI. Each DSC contained 12 TMI-2 canisters. The TMI-2 canisters contained the rubble from the TMI-2 reactor core. The 29th, and final DSC, was loaded into the ISFSI on April 20, 2001. This completed the loading of the TMI-2 ISFSI.

1 Operation of an ISFSI (60855, 83728, 40801)

1.1 Inspection Scope

The operational inspection of the TMI-2 ISFSI reviewed selected areas dealing with radiation protection and ALARA, operations, quality assurance, and the corrective action program to verify continued compliance with federal regulations and licensing commitments.

1.2 Observations and Findings

a. Radiation Protection and ALARA

Procedure MCP-2955, "ISFSI Radiological Environmental Monitoring Program," Revision 10, implemented the TMI-2 Radiological Environmental Monitoring Program (REMP) in accordance with the requirements of Technical Specification 5.5.3 and 10 CFR 72.44(d)(2). The REMP was designed to monitor the two predominant radiation exposure pathways inherent with the facility design; namely, airborne radioactivity releases and direct radiation. The airborne radioactivity release pathways were monitored using a combination of loose surface contamination surveys and monthly air sampling. The direct radiation exposure pathway was monitored using 22 environmental TLDs located on the ISFSI outer perimeter fence. Contact radiation levels on the Horizontal Storage Module (HSM) rear panel doors and canister purge and vent port filter housings were measured quarterly in accordance with Technical Specification SR 3.2.2.1. Technical Specification SR 3.2.2.1 contained two radiation limits: 100 mrem/hr at the HSM rear access door and 1,200 mrem/hr at each HEPA filter housing.

The 2003 REMP report was submitted to the NRC on February 25, 2004. The radiation levels measured on the HSM rear access doors were less than 5 mrem/hour, well below the technical specification limit of 100 mrem/hour. The radiation levels measured on the

canister purge and vent port HEPA filter housings ranged from 2 mrem/hr to 30 mrem/hr. These readings were well below the technical specification limit of 1,200 mrem/hr.

The loose surface contamination survey results for the purge, vent, and drain ports were less than Minimum Detectable Activity (MDA) levels for both beta-gamma and alpha particles. There were no individual samples requiring re-analysis using gamma spectroscopy.

A particulate air monitor was operated continuously for 1 week each month on the ISFSI pad. The pre-operational baseline for the ISFSI was $4.0E-14$ FCi/cc gross activity. Any readings above the baseline required that a gamma spectroscopy analysis be performed to determine the nuclide(s) causing the increase. Cesium-137 was the key indicator used to identify abnormal releases from the canisters. Gamma spectroscopy on the monthly air samples did not identify any increases in Cesium-137 activity.

There were 22 environmental TLDs located around the ISFSI outer perimeter fence. The TLD exposure results were provided in both the 2003 and 2004 REMP reports and indicated no increase in direct radiation levels above the pre-operational baseline values. The TLDs located in the southwest corner of the ISFSI received a mean dose of 0.9 mrem/day, while the other TLDs received a mean dose of 0.6 - 0.7 mrem/day. The higher reading on the TLDs located in the southwest corner of the ISFSI was attributed to the mixed waste storage area CPP-1617, located approximately 200 meters southwest of the ISFSI.

The 2003 REMP report concluded that airborne radioactivity releases and direct radiation exposure from the ISFSI during 2003 did not contribute to any increase in the maximum potential dose commitment to the general public. There were no radioactive liquid effluents released by the facility.

The 2004 REMP report for the ISFSI was submitted to the NRC on February 24, 2005. The airborne radioactivity and direct radiation exposure data contained in the 2004 report was consistent with the 2003 report. The REMP data collected from January 2005 to March 2005 was also reviewed and found to be consistent with the 2003 and 2004 REMP data.

The ISFSI collective radiation exposure reached a peak of 0.234 person-rem in 2001 at the height of loading activities. The collective radiological exposure during normal ISFSI storage operations that occurred in 2003 and 2004 were recorded as 0.014 person-rem and 0.010 person-rem, respectively. The ISFSI collective dose had been steadily decreasing since 2001, due to completion of significant dose related activities.

The licensee was required by 10 CFR 20.1502(a) to monitor occupational radiation exposure for individuals likely to receive a deep dose equivalent of 100 mrem in 1 year. 10 CFR Part 20.2206(b) required the licensee to submit an annual report of the radiation exposure received by the individuals monitored under 10 CFR 20.1502(a). Currently, no individuals met the estimated 100 mrem/yr expected dose and no annual report was

being submitted to the NRC. However, occupational radiation exposure monitoring of TMI-2 ISFSI personnel was being performed as a sound radiological practice.

A self assessment of the ISFSI radiation protection and ALARA programs was performed in the first quarter of 2004 and the results documented in INTEC Self-Assessment 041626. The scope of the assessment was to verify that the radiation protection program requirements of 10 CFR 72, 10 CFR 20, the TMI-2 Safety Analysis Report (SAR), and TMI-2 Technical Specifications had been effectively implemented. Areas reviewed included control of occupational radiation exposure (ALARA); control of liquid and gaseous radioactive effluents; control of radiation exposure to members of the public; maintenance and storage of records; and radiological control area postings. The self assessment concluded that the ISFSI radiation protection program requirements had been effectively implemented during 2004.

The 2005 self assessment of the ISFSI radiation protection and ALARA programs was documented in INTEC Self-Assessment 05286. The 2005 assessment mirrored the 2004 assessment in terms of scope, lines of inquiry and conclusions reached.

b. Operations

The canisters placed in storage at the ISFSI were required by Technical Specification SR 3.2.2.1 to be surveyed on a periodic basis at the vent of each canister. The frequency of the radiological surveys was defined in the technical specification based on the length of time the canister had been at the ISFSI. Most canisters were required to be surveyed on a quarterly basis with several of the canisters being old enough that annual surveying was allowed. Records for 2004 and the first quarter 2005 were reviewed. Quarterly radiation surveys of the vents had been performed on all the canisters.

During the inspection, the licensee demonstrated dose rate monitoring of the HSM rear door and HEPA filter housings using procedure TPR-7066, "Periodic HSM Monitoring and DSC Sampling," Revision 5, and Radiation Work Permit (RWP) 31004810. The team leader conducted a pre-job briefing covering the job safety hazards, evacuation routes and electronic dosimeter settings.

Procedure TPR-7066, Step 3.1, listed the qualification requirements for personnel performing the procedure. The training records for the four personnel involved in the demonstration were reviewed. The technical leader, radiological control technician and both ISFSI operators were current in their qualifications, as required by Technical Specification 5.3.2 and 10 CFR 72.190.

The HSM rear door radiation dose rate was measured at less than 1 mrem/hr with the door closed, which was well below the technical specification limit of 100 mrem/hr. The purge port HEPA filter housing dose rate was measured at 18 mrem/hr and the vent port HEPA filter housing was measured at 30 mrem/hr. Both HEPA filter housing dose rates were well below the technical specification limit of 1,200 mrem/hr. There were two gaps between the canister and the horizontal storage module; one below the purge port and the other below and to the right of the vent port. The radiation dose rates from these

gaps was measured at 110-120 mrem/hr. All smear surveys taken found no measurable contamination present. These radiation and contamination survey results were consistent with the readings found during the quarterly surveillances performed on HSM-30 during January 2005, April 2005 and all four quarters of 2004.

The instruments used for the survey included an Eberline E-600 for neutron measurement, an Eberline RO-20 for beta-gamma measurement, and a Ludlum 2A frisker for smear samples. All instruments were verified to be within their calibration intervals.

Annual hydrogen gas sampling of the canisters was required by Technical Specification 3.2.3. The last annual hydrogen gas sampling of the 29 loaded canisters had been performed during July, August and September of 2004. The canisters were sampled using Procedure TPR-7066 and RWP 31003774. Documentation was selected for HSM numbers 2, 9, 18, and 20 for review. HSM-2 was sampled in July 2004 using Revision 3 of Procedure TPR-7066. HSM-9 was sampled in August 2004 using Revision 4 of Procedure TPR-7066. HSM-18 and HSM-20 were sampled in September 2004 using Revision 4 of Procedure TPR-7066. The Lower Explosive Limit (LEL) for hydrogen is 5.0 percent by volume. The canister limit for hydrogen was specified as 0.5 percent, or 10 percent of the LEL. All canister gas samples indicated hydrogen concentrations of less than 0.5 percent by volume.

A tour of the ISFSI was conducted. All 22 TLDs were observed to be in place around the ISFSI outer fence, the ISFSI fence was intact, and no erosion had occurred under the ISFSI fence. The ISFSI pad and storage modules had been maintained in good condition.

A seagoing cargo van (Sea-Van) was located next to the spare storage module, HSM-15. The Sea-Van contained combustible materials including wooden cabinets, wooden handled brooms, rakes and shovels, cardboard boxes and folding chairs. The combustible material had been evaluated in accordance with Procedure HAD-79, "Combination Fire Hazard and Fire Safety Analysis for CPP-1774 TMI-2 Independent Spent Fuel Storage Installation," Revision 2. The SAR had evaluated a large fire that burned for 2 hours around the HSM. The fire hazards analysis of the combustible material located in the Sea-Van concluded that the quantity of combustibles was insufficient to exceed the SAR evaluated fire. Further, any potential damage from a fire in the Sea-Van would be limited to the empty HSM and; therefore, would not threaten the Important-To-Safety ISFSI equipment.

The ISFSI pad and fence were not posted as a Radiologically Controlled Area (RCA). The licensee had reduced the RCA to behind the HSM cover plates. Each HSM cover plate was properly posted as a Radioactive Material Area and a Radiation Area.

License SNM-2508, Condition 14, required that the NRC Director, Nuclear Material Safety & Safeguards, be notified at least 90 days in advance of the replacement of the DOE M&O contractor for the TMI-2 ISFSI. A letter was provided to the NRC Director, Nuclear Material Safety & Safeguards, on August 13, 2004, stating the intent of DOE to replace the existing contract with two separate contracts. One contract was intended to

provide services for INEEL site operations, with an effective date of March 1, 2005. A second contract was intended to staff the portion of the project that was responsible for the management support of the TMI-2 ISFSI, with an effective date of May 1, 2005. Letters were provided to the NRC on November 16, 2004, and March 28, 2005, that provided notification of the award of the INEEL contract to Battelle Energy Alliance and the award of the management support contract to CH2M Hill and Washington Group International, respectively.

Interviews with selected ISFSI personnel were conducted to discuss potential changes due to the new contracts being issued that could effect the ISFSI. The potential changes associated with the ISFSI operations appeared to be minimum. The contractor replacement would affect the Safety Review Committee membership. New members had been identified and were scheduled for required training. Additionally, the licensee was required to assess the performance of the M&O contractor and provide a statement to the NRC verifying that the replacement of the contractor has had no effect on the execution of the licensed responsibilities of the ISFSI within 180 days of the replacement.

c. Quality Assurance

The quality assurance program for the ISFSI was described in Chapter 11 of the SAR and implemented by the document entitled "Quality Assurance Requirements and Description (QARD)," DOE/RW-0333P, Revision 10. This was the same revision of the QARD that was in effect during the last NRC inspection. No changes had been made to the governing quality assurance program requirements.

Procedure IQP-18.02, "Conduct of Audits," Revision 1, provided instructions for conducting ISFSI QA audits. The licensee had conducted two annual audits (03-ISFSI-AU-001 and 04-ISFSI-AU-001) of the DOE ISFSI program since the last inspection. The audits evaluated if the criterion identified in the QARD were being achieved by the ISFSI program implementation and listed associated concerns or conditions that had been found that were adverse to quality. Several concerns had been identified in both audits and four conditions adverse to quality had been identified in audit 04-ISFSI-AU-001. The concerns and conditions identified as adverse to quality had been entered into and were tracked by the M&O Contractor's corrective action system. Both of the audits concluded that the M&O Contractor's QA ISFSI program was adequate in addressing the imposed requirements and was effectively implemented overall.

Surveillances had been conducted in accordance with the requirements of Procedure IQP-18.03, "Conduct of Surveillances," Revision 1. The surveillances encompassed many of the ISFSI programs including: the corrective action program (03-ISFSI-S-009), ISFSI routine operations (04-ISFSI-S-001), ISFSI Safety Review Committee (04-ISFSI-S-003), ISFSI SAR training incorporation (04-ISFSI-S-006) and INEEL record storage facility (04-ISFSI-S-010).

An audit of the DOE ISFSI QA program was conducted February 7 - 10, 2005, as documented in Audit Report 05-ISFSI-AU-0001. The purpose of the audit was to

evaluate effectiveness of implementation and adequacy of the ISFSI procedures and processes that implement QA requirements of the Fort Saint Vrain and TMI-2 SARs. There were no significant conditions adverse to quality and one concern that were identified during the audit. The audit team concluded that the implementation of the procedures and ISFSI related documents were satisfactory and that the QA Program organization was effective.

d. Corrective Actions

The corrective action program for the ISFSI was described in Chapter 11 of the SAR. The Implementing Procedure IQP-16.01, "Corrective Action," Revision 3, provided guidance for initiating, evaluating and dispositioning deficiency reports and corrective action requests. Procedure IQP-16.01 specified that measures to determine the cause of the condition and implement corrective actions necessary to prevent recurrence were required for significant conditions that were determined to be adverse to quality.

The inspectors selected three of the deficiency reports generated since the last inspection for review. The deficiency reports selected for review were ICARE 35990, ICARE 36343 and ICARE 31854. Deficiency report ICARE 35990 identified that a single document listing radiologically restricted areas was not being properly maintained. This deficiency had been identified during a licensee self assessment. Licensee Procedure PRD-317, "Radiation Protection, Safety and Health, and Environmental Protection Programs for NRC Regulated Facilities," Revision 1, Section 3.1.12.4.C., was revised to specify a single document. Deficiency report ICARE 36343 identified the unauthorized entry of a radiological control technician into the ISFSI. The licensee determined that the cause was due to an individual's failure to follow ISFSI access procedures and implemented appropriate corrective action. Deficiency report ICARE 31854 identified that temporary record storage requirements had not been specified as required by the QARD. As part of the corrective actions, the licensee defined temporary storage as one year and specified that the duplicate record storage requirements were being achieved by maintaining a paper record and an electronic record at separate locations.

The licensee corrective action program monitored the number of open issues associated with deficiency reports. Since November 2004, the number of open issues had been steadily decreasing. The licensee chart indicated that six open issues existed on April 25, 2005.

1.3 Conclusion

The radiological environmental monitoring reports from 2003 and 2004 documented that radiological conditions had not changed at the ISFSI from previously reported levels and were consistent with pre-operational baseline values.

The ISFSI collective radiation exposure to workers had continued to improve over time from a peak of 0.234 person-rem in 2001 to the current 0.010 person-rem in 2004.

A program for control of occupational radiation exposure, also known as maintaining occupation dose As Low As Reasonably Achievable (ALARA), had been implemented at

the ISFSI. Procedural controls were present to provide adequate oversight of potential high occupational radiation exposure evolutions.

ISFSI operational activities reviewed met technical specification requirements and were conducted in accordance with site procedures. Selected training records for ISFSI personnel were current and complete.

The ISFSI pad area and Horizontal Storage Modules (HSM) were well maintained. The small amount of combustibles present at the ISFSI had been evaluated by the site and found not to impact any Important-to-Safety related equipment. Radiological warnings were properly posted at the ISFSI.

DOE had notified the NRC of plans to replace the existing Maintenance & Operations (M&O) contractor for the ISFSI. This is part of the normal process by DOE to periodically re-bid the site contract. The transition to the new M&O contractor should have minimal impact on the ISFSI operations.

No changes had been made to the ISFSI quality assurance manual since the last inspection. Annual audits of the ISFSI and selected surveillances had been performed by the QA organization. Deficiencies discovered during the audits and surveillances had been entered into DOE's corrective action system. No issues or concerns were identified with the QA program and its implementation.

The corrective action program implementing procedure and selected deficiency reports generated since the last inspection were reviewed. Corrective actions taken by the licensee were appropriate. No issues or concerns were identified with the corrective action program and its implementation.

2 Review of 10 CFR 72.48 Evaluations (60857)

2.1 Inspection Scope

Requirements of the Safety Review Committee (SRC) implementing procedure for safety reviews and selected safety evaluations/screenings for issues associated with the ISFSI were reviewed to determine if adequate evaluation and resolution of issues were being completed.

2.2 Observations and Findings

The minutes of the two most recent SRC meetings were reviewed. The most recent meetings had been conducted on October 27, 2004, and June 23, 2004. The licensee had met the license requirement for conducting SRC meetings on an annual basis. The meetings had been well attended and had included a quorum of committee members present at each meeting. The training records of selected SRC members present at the meetings were compared to training requirements contained in Procedure CTR-19, "ISFSI Safety Review Committee Charter," Revision 8, Section 3.4.6, and found to be satisfactory. The SRC was composed of members from the DOE contractor

organizations. Due to the recent selection and implementation of a new M&O contractor, several of the SRC members had been newly appointed and had been scheduled to receive additional training. DOE was aware of the changes to the SRC membership and was actively tracking the training records of the new members.

Procedure MCP-2925, "Screen and Evaluate Changes," Revision 13, was used to review potential changes to the ISFSI facility, cask design and procedures. First, an initial screen was performed by the licensee utilizing the guidance found in Appendix A of the procedure to determine if a 10 CFR 72.48 evaluation would be required. Appendix B of the procedure contained the guidance and questions required to perform a safety evaluation to meet the requirements of 10 CFR 72.48(c)(2). Additionally, Appendix C of the procedure contained the guidance to perform a "decrease in effectiveness" review of proposed changes to essential programs as required by 10 CFR 72.44.

Several safety screenings had been performed since the last NRC inspection, but only one issue had required a full safety evaluation. The issue involved the analysis of icing between the HSM and the ISFSI basemat interface. The evaluation assessed the potential impact to the ISFSI for an icing condition event similar to the circumstances that occurred at the Maine Yankee ISFSI. NRC Information Notice 2003-16 had been issued to alert licensee's to the problem that had occurred at Maine Yankee where significant icing between the bottom of the storage casks and the concrete storage pad had been identified. License Evaluation TMI-04-004 had been completed and included a review of engineering documents EDF-4818 and EDF-4904. Engineering analyses from EDF-4818 and EDF-4904 concluded that the kinetic energy of a design basis tornado generated missile would be much greater than the kinetic energy associated with collisions caused by the movement of an HSM under icing conditions during a design basis earthquake scenario. Therefore, the potential icing condition had been determined by the licensee to be bounded by other previously analyzed accident conditions.

Selected licensee screenings 04-001, 04-017 and 05-007 were reviewed to confirm that issues identified in the screenings had been adequately evaluated to determine that a full safety evaluation was not required.

2.3 Conclusion

The safety review program was reviewed, including the safety review procedure and selected responsibilities of the Safety Review Committee. One safety evaluation and selected screenings conducted since the last NRC inspection were reviewed and found to meet regulatory requirements. No issues or concerns were identified with the safety review program and its implementation.

3 Followup (IP 92701)

(Closed) IFI 72-20/0301-01 Long-Term Storage of Records: During the routine NRC inspection conducted in July 2003, an issue was identified concerning the lack of a specified maximum time limit for keeping QA records in temporary storage and that the long-term dual record storage requirements were not being met. Records storage requirements were specified in DOE/RW-0333P, "Quality Assurance Requirements and Description." This issue was entered into the licensee's corrective action system as ICARE 31854.

Procedure PLN-1243, "NRC Records Management Plan," Revision 4, Section 2.2.3, specified that electronic image files of the records stored and maintained on the licensee's electronic document management system were regarded as the duplicate copy of the record. Further, the maximum time limit for keeping the QA records in temporary storage, pending scanning into the electronic document management system, was specified as one year from the receipt of the records in the record center. The requirements contained in PLN-1243 were for records generated and maintained by the M&O contractor at the TMI-2 ISFSI. These changes fully addressed the deficiencies noted during the last inspection.

Additional records were generated and maintained by DOE organizations responsible for the ISFSI. The records generated by DOE were subject to separate controls. Procedure DOE/ISFSI/QMP-001, "Quality Management Plan for the Department of Energy Idaho Operations Office Independent Spent Fuel Storage Installations Operations Phase," Revision 4, Section 2.17, specified the maximum time limit for temporary record storage as one year. After the one-year period, the records would be transferred to permanent storage at the licensee's record storage facility or electronically scanned into the electronic document management system for the remainder of the lifetime storage.

Section 17.2.10 of DOE/RW-0333P specified that dual storage facilities were not required to meet the design and construction requirements for a long-term single storage facility since the dual set of QA records would be stored at locations sufficiently remote from each other to eliminate the chance of exposure to simultaneous hazards. The dual storage requirement was met for the M&O QA records. The DOE QA generated records were either stored in the long-term single storage facility or the records were electronically stored at dual storage facilities.

4 Exit Meeting

The inspector presented the inspection results to the FSV/TMI-2 Facility Director at the conclusion of the inspection on April 27, 2005. The licensee acknowledged the findings presented. The licensee did not identify as proprietary any information provided to, or reviewed by, the inspectors.

ATTACHMENT 1
Supplemental Inspection Information

PARTIAL LIST OF PERSONS CONTACTED

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T. Morgan, QA Specialist
T. Saxton, ISFSI Training Coordinator
W. Swenson, EOC Operations
S. Wold, Training Manager

INSPECTION PROCEDURES USED

40801	Self-Assessment, Auditing, and Corrective Action at Permanently Shutdown Reactors
60855	Operations of an ISFSI
60857	Review of 10 CFR 72.48 Evaluations
83728	Maintaining Occupational Exposure ALARA
92701	Followup

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

IFI 72-20/0301-01 Long-Term Storage of Records

Discussed

None

LIST OF ACRONYMS

ALARA	As Low As Reasonably Achievable
CFR	Code of Federal Regulations
DOE-ID	Department of Energy-Idaho Operations Office
DSC	Dry Shielded Canister
HSM	Horizontal Storage Module
ICARE	Issues Communication and Resolution Environment
INEEL	Idaho National Engineering and Environmental Laboratory
INTEC	Idaho Nuclear Technology and Engineering Center
ISFSI	Independent Spent Fuel Storage Installation
LEL	Lower Explosive Limit
M&O	Maintenance & Operation
MDA	Minimum Detectable Activity
NRC	Nuclear Regulatory Commission
QARD	Quality Assurance Requirements and Description (QA Plan)
RCA	Radiologically Controlled Area
REMP	Radiological Environmental Monitoring Program
RWP	Radiation Work Permit
SAR	Safety Analysis Report
SRC	Safety Review Committee
TLD	Thermo-Luminescent Dosimeter
TMI-2	Three Mile Island Nuclear Power Plant-Unit 2
FCi/cc	MicroCuries per cubic centimeter