



## Department of Energy

Idaho Operations Office  
1955 Fremont Avenue  
Idaho Falls, ID 83415

March 15, 2007

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

SUBJECT: Submittal of Three Mile Island Unit 2 Independent Spent Fuel Storage Installation  
(TMI-2 ISFSI) Update Reports (Docket 72-20) (EM-FMDP-07-008)

Dear Sir or Madam:

The Department of Energy, Idaho Operations Office (DOE-ID) was issued Materials License SNM-2508 on March 19, 1999 for the TMI-2 ISFSI. Since the date of License issuance, DOE-ID has made changes to the Safety Analysis Report (SAR), the Technical Specification (TS) Bases and essential programs under the provisions of 10 CFR 72.48, TS 5.5.1 and TS 5.5.2. DOE-ID hereby submits the following information, which accurately presents changes made to the SAR, TS Bases and essential programs from March 1, 2005 (the cutoff date of the last update report), through March 1, 2007:

- Update reporting of changes made to the SAR pursuant to 10 CFR 72.70 (b) and a copy of the updated TMI-2 ISFSI SAR pages,
- Update of changes made to the facility and its procedures pursuant to 10 CFR 72.48,
- Update of changes made to the Technical Specification Bases pursuant to TS 5.5.1, and
- Update of changes made to the Radiological Environmental Monitoring Program, the Training Program, and the Quality Assurance Program pursuant to TS 5.5.2.

If you have any questions please call me at (208) 526-5381.

Sincerely,

A handwritten signature in black ink that reads "Bradley J. Davis".

Bradley J. Davis  
FSV/TMI-2 Facility Director

Enclosure

cc: NRC Region IV

NMSSO1

# Update Report 72-20/2007-01

TMI-2 ISFSI SAR Update  
TMI-2 ISFSI 72.48 Evaluations  
TMI-2 ISFSI TS 5.5.1 Evaluations  
TMI-2 ISFSI TS 5.5.2 Evaluations

## Introduction

The Department of Energy's Idaho Operations Office (DOE-ID) was issued license SNM-2508 to operate the Three Mile Island Unit 2 (TMI-2) Independent Spent Fuel Storage Installation (ISFSI). The date of issuance was March 19, 1999. This update report provides the following reports, which were last updated in March 2005:

- The biennial SAR update pursuant to 10 CFR 72.70, Safety Analysis Report Updating. The SAR update is provided in the section titled "Description of Changes to the Safety Analysis Report" and in the attachment providing the SAR replacement pages.
- The biennial 72.48 evaluations report pursuant to 10 CFR 72.48. This report, comprised of summaries of evaluations of changes made pursuant to 10 CFR 72.48, is provided in the section titled "Changes, Tests, and Experiments."
- The biennial Technical Specifications Bases evaluations report pursuant to TS 5.5.1. This report is provided in the section titled "Changes to the Technical Specification Bases."
- The biennial essential program evaluations report pursuant to TS 5.5.2. This report covers changes made to three of DOE's essential programs and is provided in the sections titled "Radiological Environmental Monitoring Program Changes," "Training Program Changes," and "Quality Assurance Program Changes." (Note: The changes to the Physical Protection Program and the Emergency Response Program are provided separately because of the reporting time frames required by 10 CFR 72.44 (e) and (f), respectively.)

This report is provided in a combined format because many of the changes described in the SAR Update are also covered by evaluations of changes made without NRC approval pursuant to 10 CFR 72.48, TS 5.5.1, and TS 5.5.2. TS 5.5.1 requires a 72.48 evaluation to be performed for any change to the Technical Specification Bases. TS 5.5.2 requires an evaluation of the change in program effectiveness (similar to the requirements of 10 CFR 72.44(e) and (f) for changes to the ISFSI Radiological Environmental Monitoring Program, Training Program, and Quality Assurance Program. These three programs are contained in the ISFSI SAR.

## Description of Changes to the Safety Analysis Report

The previous update of the TMI-2 ISFSI SAR made pursuant to 10 CFR 72.70 was provided in March, 2005. Since that report the following changes have been made:

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- A. Changes were made to Chapter 3, Principal Design Criteria, to update the reference to the criticality evaluation. The criticality evaluation was updated to answer questions arising from a problem identified with the computer code. No change was required to the text due to the update. "INEEL" was changed to "INL" and "M&O" was deleted.
- B. Changes were made to Chapter 4, Operation Systems, to remove "INEEL" or change "INEEL" to "INL" throughout the chapter. A paragraph was added to Section 4.3.1.1 to discuss elastomeric o-rings as allowed by License Amendment 4. Also in Section 4.3.1.1 "stainless steel" was deleted in front of "dust covers." A new reference 4.16 was added to section 4.8. This reference provides justification for the different seal material. The figures in this chapter were cleaned up and made easier to read without changing the information on the figures.
- C. Changes were made to Chapter 7, Radiation Protection, to remove "INEEL" or change "INEEL" to "INL" throughout the chapter. Verb tense was corrected to reflect the current status of the facility. "Inerting and" was removed from Section 7.1.2.1 to correct an error. Two paragraphs were inserted, one in Section 7.4.1 and the other in Section 7.6.3 to add discussion consistent with License Amendment 4. A new reference was added to provide justification for the License Amendment 4 changes. In Section 7.4.2 and Table 7.4.2 "rems" was changed to "rem." In Section 7.3.3 "three" was changed to "0.3" to correct an error and provide consistency with other SAR sections.
- D. Changes were made to Chapter 8, Analysis of Design Events, to remove "INEEL" or change "INEEL" to "INL" throughout the chapter. A new Section 8.1.4 was inserted to add discussion consistent with License Amendment 4. A new reference was added to provide justification for the License Amendment 4 changes. In Table 8.1-3 Note 7 "S<sub>y</sub>" was changed to "S<sub>u</sub>" as identified during reviews for License Amendment 4. The figures in this chapter were cleaned up and made easier to read without changing the information on the figures.
- E. Changes were made to Chapter 9, Conduct of Operations, to remove "M&O" and "INEEL" or change "INEEL" to "INL" throughout the chapter. Section 9.1 was changed to reflect a new DOE-ID organizational structure. Figure 9.1-1 was also modified to reflect these organizational changes. In Section 9.6.4 "INEEL" was changed to "INEL" in the title of the decommissioning plan.

Changes were also made to the Training Program, which is located in Section 9.3 of the SAR. These changes were also evaluated to ensure no decrease in program effectiveness occurred; these changes are described below.

- F. Changes were made to Chapter 11, Quality Assurance. These changes were also evaluated to ensure no decrease in program effectiveness occurred and are described below.

Attached to this report are the replacement pages for the SAR, as required by 10 CFR 72.70.

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## Changes, Tests, and Experiments

The previous report of changes made pursuant to 10 CFR 72.48 was provided in March 2005.

There were no changes made pursuant to 10 CFR 72.48 during this period.

## Changes to the Technical Specification Bases

The previous update of the Technical Specification Bases made pursuant to TS 5.5.2 was provided in March 2005.

### Description of Changes

The Technical Specification Bases for the TMI-2 ISFSI were changed to be consistent with the changes included in License Amendment 4. License Amendment 4 changed some of the actions to be taken in the event of a leaking vent and purge port seals and allowed for the use of elastomeric seals. Also, "INEEL" was either removed or changed to "INL" throughout the document as appropriate.

### Summary of Evaluations

The changes were made as approved in License Amendment 4. Additionally, the site name change was evaluated and determined to have no effect on the Technical Specifications Basis.

## Radiological Environmental Monitoring Program Changes

The previous update of the Radiological Environmental Monitoring Program made pursuant to TS 5.5.2 was provided in March 2005.

### Description of Changes

The Radiological Environmental Monitoring Program is provided in Section 7.6.1 of the TMI-2 ISFSI SAR. The Radiological Environmental Monitoring Program described in the SAR for the TMI-2 ISFSI was changed to remove "INEEL" or change to "INL" throughout the section as appropriate.

### Summary of Evaluations

Because these changes are editorial in nature these changes were determined to have no reduction on the quantity or quality of resources for the Radiological Environmental Monitoring Program described in the SAR for the TMI-2 ISFSI.

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## **Training Program Changes**

The previous update of the Training Program made pursuant to TS 5.5.2 was provided in March 2005.

### Description of Changes

The Training Program is provided in Chapter 9 of the TMI-2 ISFSI SAR. The Training Program described in the SAR for the TMI-2 ISFSI was changed to remove "INEEL" or change to "INL" throughout the section as appropriate.

### Summary of Evaluations

Because these changes are editorial in nature these changes were determined to have no reduction on the quantity or quality of resources for the Training Program described in the SAR for the TMI-2 ISFSI.

## **Quality Assurance Program Changes**

The previous update of the Quality Assurance Program made pursuant to TS 5.5.2 was provided in March 2005.

### Description of Changes

The Quality Assurance Program is provided in Chapter 11 of the TMI-2 ISFSI SAR. The Quality Assurance Program described in the SAR for the TMI-2 ISFSI was changed to describe the new DOE organizational structure. "M&O" and "INEEL" were removed or changed to "INL" throughout the chapter as appropriate. Section 11.17 was changed to avoid confusion about the DOE-ID records management system.

### Summary of Evaluations

The organizational changes were determined to allow sufficient organizational freedom for organizations responsible for QA effectiveness. The name changes are editorial and have no effect on the Quality Assurance Program. The change to the records management discussion allows the QA records to be managed by the contractor as it has always been done. These changes have been determined to have no reduction on the quantity or quality of resources for the Quality Assurance Program described in the SAR for the TMI-2 ISFSI.

## **Attachments**

TMI-2 ISFSI SAR Chapters 3, 4, 7, 8, 9 and 11.