



SMUD

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AN ELECTRIC SYSTEM SERVING THE HEART OF CALIFORNIA

MPC&D 02-051

May 23, 2002

U.S. Nuclear Regulatory Commission
Attn.: Document Control Desk
Washington, DC 20555

Docket No. 72-11
Rancho Seco Independent Spent Fuel Storage Installation
License No. SNM-2510

RANCHO SECO BIENNIAL REPORT

Attention: Randy Hall

In accordance with 10 CFR 72.48(d)(2), we are submitting the Rancho Seco Independent Spent Fuel Storage Installation Biennial Report. This report includes a summary of safety evaluations required by 10 CFR 72.48.

Members of your staff with questions requiring additional information or clarification may contact Bob Jones at (916) 732-4843.

Sincerely,

 For S.R.

Steve Redeker
Manager, Plant Closure & Decommissioning

Cc: E.W. Merschhoff, NRC, Region IV

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10 CFR 72.48 Safety Evaluation Summary

The following is a summary of facility changes, tests, and experiments that required a safety evaluation under 10 CFR 72.48. None of the following changes required prior NRC approval via license amendment.

SMUD Initiated Safety Evaluations

- Engineering Report ERPT-M0233, Revision 0 “Analysis of the Effect of Fel-Pro N-5000 Lubricant on Corrosion in Dry Cask Storage Containers Over a 50 Year Period” justifies the use of Fel-Pro N-5000 lubricant for use on the HSM support rails. Engineering confirmed the suitability of the Fel-Pro N-5000 lubricant for the temperatures anticipated during storage in the HSM.
- Temporary Modification 01-02 changed the cadmium plated cask closure bolts to nickel plated bolts. The bolts must comply with the drawings in the 10 CFR 71 SAR prior to using the cask for offsite transportation.
- Temporary Modification 02-01 places vehicle barriers (K-rails) around the ISFSI.
- Design Change Package DCP 02-0001 “Manual Fuel Handling Mast,” provides an “alternate” fuel handling tool for loading the FF-DSC. Testing the alternate fuel handling tool will be consistent with the surveillance requirements in Technical Specification D3/4.3.
- Plant staff made a change to correct an error in a sentence in ISFSI FSAR, Revision 0, Volume I, Section 9.1.2.2 “Personnel Functions, Responsibilities, and Authorities.” The correction makes the sentence consistent with the intent of the ISFSI training program described in ISFSI FSAR Section 9.3 and the Dry Fuel Storage Equipment Operator Training and Certification Program.
- Potential Deviation from Quality (PDQ) 01-0060, Revision 2 replaces the tires on the cask transfer trailer with new tires that are filled with foam instead of air. The foam looks and feels more like liquid rubber that has solidified than a typical foam product.
- PDQ 01-0100 evaluates a cask lid closure bolt that became stuck and could not be removed by ordinary means. One of the corrective actions to prevent recurrence is to use shorter lid closure bolts instead of the transportation closure bolts that were used previously.
- Deviation from Quality (DQ) 01-0026 “Interference between the Lifting Lug and Spacer Disk” reflects changes made by TNW NRC 01.012. This NCR changes some of the stresses in ISFSI FSAR, Volume I, Table 8-4. All stresses remain below Code allowables and are technically acceptable.

- DQ 00-0111 identified an additional exception required to the ASME Code. The exception is to use helium gas in lieu of water for the DSC fabrication pressure test. This exception, which the NRC approved in March 2001, requires a change to ISFSI SAR, Appendix A.
- DQ 01-052 is associated with the “accept as-is” disposition of the DQ, which addresses the scratch in the cask/canister that occurred during the first fuel transfer. TNW will revise Note 15 to ISFSI SAR drawing NUH-05-4004, Revision 13 to change the minimum canister shell thickness from 0.563 inches to 0.500 inches. The canister shell continues to meet minimum wall thickness requirements.

Transnuclear Initiated Safety Evaluations

- Transnuclear West (TNW) Non-conformance Report (NCR) 01.077 provides for a more flexible tolerance on the position of the guide sleeve openings. The disposition of this NCR results in a change to ISFSI FSAR Drawing NUH-05-4004, Revision 13.
- TNW Engineering Change Notice (ECN) 01-0835 adds a chamfer to the keyway in the MP187 bottom end closure to improve the DCS/MP187 shear key interface. Although NRC approval is not required to implement this change under 10 CFR Part 72, NRC approval is required before using the MP187 cask for off site transport of spent nuclear fuel.
- TNW ECN 01-0855 “Revise Pressure Test Requirements for the DSC Shells” revises the pressure test range for the DSC shell from 11 to 12 psig to 11 to 14 psig. The reason for the change is to prevent violation of the maximum test pressure due to heat-up of the test medium. This ECN requires a change to ISFSI FSAR Table 3-3.
- TNW ECN 01-0842 deletes Diamond Note 4 and the dimension from top of the DSC shell to the top of the support ring from SAR drawing NUH-05-4004, Revision 13.
- TNW ECN 01-0843, Revision 0 makes several changes to SAR drawings NUH-05-1051 and NUH-05-1053 to improve the fabricability of the NUHOMS canisters.
- TNW ECN 01-0866, Revision 0 affects SAR drawings NUH-05-1021 and NUH-05-1051. The safety evaluation evaluates adding a note to the shear key to grapple ring support weld callout to clarify that no weld is required at the drain hole location.

- TNW ECN 01-0849 includes editorial changes, design changes, and changes to enhance fabricability for the FF-DSC.
- TNW NCR 01.079, Revision 0 evaluates and specifies the repair of thread damage to a tapped hole in the FC-DSC top shield plug assembly. The use of this repair requires a revision to ISFSI FSAR Drawing NUH-05-4004, Revision 13 to allow for threaded inserts in lieu of tapped holes. There is no adverse mechanical impact (e.g., increased stresses, etc.) to the shield plug due to the implementation of this repair.
- TNW ECN 01-0852 makes design changes to the top lid of the individual fuel assembly cans that will be used in the FF-DSC (i.e., the DSC that will contain damaged fuel assemblies). These changes improve operability and the interface with other fuel handling equipment.