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Trojan ISFSI
Docket 72-17
License SNM-2509

ATTN: Document Control Desk
Director, Spent Fuel Project Office
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

PGE-1080-2004, Annual Report of the Trojan Independent
Spent Fuel Storage Installation for 2004

The enclosure to this letter provides one copy of Portland General Electric (PGE) Company's Annual Report of the Trojan Independent Spent Fuel Storage Installation (ISFSI) for the calendar year 2004. This report is submitted in accordance with the requirements of 10 CFR 72.44(d)(3), 10 CFR 72.48(d)(2), and Trojan ISFSI Technical Specifications 5.5.1.d and 5.5.2.c.

If you have any questions regarding this correspondence, please contact Mr. Jay Fischer of my staff at (503) 556-7030.

Sincerely,

Stephen M. Quennoz
Vice President, Generation

Enclosure

c: Director, DNMS, NRC Region IV
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Nmss01

PGE-1080-2004

ANNUAL REPORT
OF THE
TROJAN INDEPENDENT SPENT FUEL STORAGE INSTALLATION
FOR 2004

Docket 72-17
License SNM-2509

PORTLAND GENERAL ELECTRIC COMPANY
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INTRODUCTION

The 2004 Annual Report for the Trojan Independent Spent Fuel Storage Installation (ISFSI) is submitted in accordance with the requirements of 10 CFR 72.44(d)(3), 10 CFR 72.48(d)(2), and ISFSI Technical Specifications 5.5.1.d and 5.5.2.c.

SUMMARY OF OPERATING EXPERIENCE IN 2004

Trojan ISFSI License SNM-2509 was issued by the Nuclear Regulatory Commission (NRC) on March 31, 1999. Amendment 4 to the license was issued by the NRC on May 18, 2004, superceding Amendment 3 in its entirety to incorporate changes since the completion of fuel loading operations in 2003. During year 2004, spent nuclear fuel has remained in the 34 storage casks at the Trojan ISFSI.

1. TECHNICAL SPECIFICATIONS BASES CONTROL PROGRAM REPORT

Requirement

Trojan ISFSI License SNM-2509, Technical Specification 5.5.1.d, requires, in part:

"Changes to the Bases implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10 CFR 72.48"

Report

Revision 2 to the Trojan ISFSI Technical Specifications Bases was transmitted via PGE letter dated February 21, 2003 (ref. VPN-013-2003, S. M. Quennoz to the U.S. Nuclear Regulatory Commission). Changes incorporated into Revision 2 included:

- A Multi-Purpose Canister (MPC) pre-heat system using nitrogen gas was added to assist in accomplishing vacuum drying of a loaded MPC.
- Maximum fuel clad temperature during loading operations was changed from 659°F to 711°F on Pages B 3.1-2, B 3.1-8, and B 3.1-9, and remained within the prescribed licensing basis limit.
- Clarification was added to Page B 3.1-3 indicating that the fuel clad temperature remains below the licensing basis limit.
- Pages B 3.1-6 and B 3.1-7 were revised to incorporate the use of an MPC pre-heat system to expedite the vacuum drying process.

Revision 3 to the Trojan ISFSI Technical Specifications Bases was transmitted via PGE letter dated July 12, 2004 (ref. VPN-039-2004, S. M. Quennoz to the U.S. Nuclear Regulatory Commission). Changes incorporated into Revision 3 included:

- Sections B 2.0, B 3.2, and B 3.3 were revised reflecting completion of the transfer of spent nuclear fuel from the Trojan Nuclear Plant Spent Fuel Pool to the Trojan ISFSI. References to a Technical Specification leakage rate are eliminated with the deletion of Section B 3.1. These changes reflected NRC approval of Amendment 4 to ISFSI License SNM-2509.
- Footers of the Bases were corrected to replace "Amendment" with "Revision." The current Amendment 2 became Revision 3.
- Section 3.3 was revised to correctly identify references.
- Editorial changes were made as necessary to conform to the changes described above and/or enhance user readability.

2. ANNUAL RADIOLOGICAL EFFLUENT RELEASE REPORT

Requirement

Trojan ISFSI License SNM-2509, Technical Specification 5.5.2.c, requires:

"An annual report shall be submitted pursuant to 10 CFR 72.44(d)(3) specifying the quantity of each of the principal radionuclides released to the environment in liquid and in gaseous effluents during the previous calendar year of operation"

10 CFR 72.44(d)(3) requires, in part:

"An annual report be submitted to the Commission in accordance with §72.4, specifying the quantity of each of the principal radionuclides released to the environment in liquid and in gaseous effluents during the previous 12 months of operation and such other information as may be required by the Commission to estimate maximum potential radiation dose commitment to the public resulting from effluent releases.... The report must be submitted within 60 days after the end of the 12-month monitoring period."

Report

By design, the confinement features of the Trojan ISFSI storage system are such that no radioactive gas or liquid effluents are expected during operation. Because the Trojan ISFSI has no routine gaseous or liquid radioactive effluents, measures to control effluents are not required and the Trojan ISFSI, therefore, does not incorporate any process or effluent monitoring equipment.

Because of its sealed design, no gaseous or liquid radioactive effluents were produced by the storage system. Routine monitoring for effluents at the Trojan ISFSI was not performed in 2004.

3. CHANGES, TESTS, AND EXPERIMENTS

Requirement

Federal Regulation 10 CFR 72.48(d)(2) requires:

"The licensee and certificate holder shall submit, as specified in §72.4, a report containing a brief description of any changes, tests, and experiments, including a summary of the evaluation of each. A report shall be submitted at intervals not to exceed 24 months"

Report

In accordance with 10 CFR 72.48, as cited above, this section provides a description of changes, tests, and experiments completed in 2003 & 2004 and a summary of the supporting evaluation.

Evaluation Number 2003-001

Subject

PGE-1069, Trojan ISFSI Safety Analysis Report (SAR).

License Change Application (LCA) 237, Spent Fuel Cask Loading in the Fuel Building, was a Trojan Nuclear Plant (TNP) and Trojan ISFSI licensing document which contained requirements for loading spent nuclear fuel into casks in the TNP Fuel Building. Changes to this licensing document were required to be evaluated in accordance with 10 CFR 50.59 by TNP Facility Operating License NPF-1, paragraph 2.C.(10). Trojan also evaluated changes to LCA 237 in accordance with 10 CFR 72.48. Therefore, this report contains the 10 CFR 72.48 evaluation for a change to LCA 237.

Fuel Handling Procedure (FHP) 50-03, Loading and Placing Concrete Cask into Storage.

Description of Change, Test, Experiment

PGE-1069, Section 5.1.1.2, was revised to delete the requirement to fill the MPC with borated water while suspended in the Cask Loading Pit.

LCA 237, Section 4.0 was revised to delete the requirement to fill the MPC with borated water while suspended in the Cask Loading Pit.

Procedure FHP 50-03 was changed to: make optional the filling of the MPC with borated water prior to placement in the Cask Loading Pit; rearrange the steps for performing MPC internal inspections after it is placed in the Transfer Cask; add clarification to the MPC lid inspection; delete use of the water jacket relief valve discharge plugs; add a step to store the Concrete Cask lid bolts; add clarification regarding fuel assembly inspection requirements and what information to record; add steps to allow use of contaminated and uncontaminated rigging when moving the MPC lid to the Cask Loading Pit; rearrange steps and add notes for the utilization of the shielding; add notes and make editorial changes, additions and deletions to improve work flow.

Summary of Evaluation

The borated water fill requirement in PGE-1069, LCA 237, and procedure FHP 50-03 was a hold over from the SNC/BFS campaign and was not necessary for the Holtec design. Its deletion was an enhancement to the ISFSI loading process. The other changes to procedure FHP 50-03 were at a level of detail not discussed in the licensing documents, and were improvements to the fuel handling process.

These changes do not result in more than a minimal increase in (1) the frequency of occurrence of an accident, (2) the likelihood of occurrence of a malfunction of a Structure, System, or Component (SSC) important to safety, or (3) the consequences of an accident or a malfunction of an SSC important to safety, as previously evaluated in the ISFSI SAR. The changes do not create a possibility for an accident of a different type, or create a possibility for a malfunction of an SSC important to safety with a different result, than any previously evaluated in the ISFSI SAR. The changes do not result in a design basis limit for a fission product barrier being exceeded or altered, or result in a departure from a method of evaluation used in establishing the design bases or in the safety analysis.