Certificate of Compliance
FOR DRY SPENT FUEL STORAGE CASKS

10 CFR PART 72

1. a. CERTIFICATE NUMBER: 1007
   b. REVISION NUMBER: 0
   c. PACKAGE IDENTIFICATION NUMBER: USA/72-1007
   d. PAGE NUMBER: 1
   e. TOTAL NUMBER OF PAGES: 4

2. PREAMBLE This certificate is issued to certify that the cask and contents, described in item 5 below, meet the applicable safety standards set forth in Title 10, Code of Federal Regulations, Part 72, "Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Wastes."

3. THIS CERTIFICATE is issued on the basis of a safety analyses report of the cask design, Model No.: Ventilated Storage Cask VSC-24

   a. PREPARED BY (Name and Address)
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   Scotts Valley, CA 95066

   b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION
   Pacific Sierra Nuclear Associates
   Safety Analysis Report for the
   Ventilated Storage Cask System

   c. DOCKET NUMBER 72-1007

4. CONDITIONS This certificate is conditional upon fulfilling the requirements of 10 CFR Part 72, as applicable, and the conditions specified below.

Effective Date:
May 7, 1993
Expiration Date:
May 31, 2013

FOR THE NUCLEAR REGULATORY COMMISSION

Charles J. Haughney, Chief
Source Containment and
Devices Branch
Division of Industrial and
Medical Nuclear Safety, NMSS

1.0 INTRODUCTION

This section presents the conditions that a potential user (licensee) of the Ventilated Storage Cask (VSC-24) system must comply with, in order to use the system under a general license issued according to the provisions of 10 CFR 72.210 and 72.212. These conditions have either been proposed by the system vendor, imposed by the Nuclear Regulatory Commission staff as a result of the review of the Safety Analysis Report (SAR), or are part of the regulatory requirements expressed in 10 CFR 72.212.

1.1 General Requirements and Conditions

1.1.1 Regulatory Requirements

Regulatory requirements define a number of technical and administrative conditions for system use. Technical regulatory requirements for the licensee (user of the VSC-24 system) are contained in 10 CFR 72.212(b).

10 CFR 72.212(b) requires that the licensee perform written evaluations, before use, that establish that: (1) conditions set forth in the Certificate of Compliance have been met; (2) cask storage paths and areas have been designed to adequately support the static load of the stored casks; and (3) the requirements of 10 CFR 72.104, "Criteria for radioactive materials in effluents and direct radiation from an ISFSI or MRS," have been met. It also requires that the licensee review the SAR and the associated SER, before use of the general license, to determine whether or not the reactor site parameters (including earthquake intensity and tornado missiles), are encompassed in the cask design bases considered in these reports.

Site-specific parameters and analyses, identified in the SER, that need verification by the system user, are as follows:

1. The temperature of 75° F as the maximum average yearly temperature, without solar incidence. (Reference SER Section 2.5);

2. The steady state temperature extremes of 100° F, (average daily temperature) with incident solar radiation, and -40° F, with no solar incidence. (Reference SER Section 2.5);

3. The "accident" short-term temperature extreme of 125° F with incident solar radiation. (Reference SER Section 2.5);

4. The horizontal and vertical seismic acceleration levels of 0.25g and 0.17g, respectively. (Reference SER Section 2.5);

5. The analyzed flood condition of 25 fps water velocity and full submergence of the loaded ventilated concrete cask (VCC). (Reference SER Section 2.5); and

6. The potential for fire and explosion should be addressed, based on site-specific considerations. (Reference SER Section 2.6).

According to 10 CFR 72.212(b), a record of the written evaluations must be retained by the licensee until spent fuel is no longer stored under the general license issued under 10 CFR 72.210.

1.1.2 Operating Procedures

Written operating procedures shall be prepared for cask handling, loading, movement, surveillance, and maintenance. The operating procedures suggested generically in the SAR are considered appropriate, as discussed in Section 11.0 of the SER, and should provide the basis for the user's written operating procedures. The following additional written procedures shall also be developed as part of the user operating procedures:

1. A procedure shall be developed for cask unloading, assuming damaged fuel. If fuel needs to be removed from the multi-assembly sealed basket (MSB), either at the end of service life or for inspection after an accident, precautions must be taken against the potential for the presence of oxidized fuel and to prevent radiological exposure to personnel during

this operation. This activity can be achieved by the use of the Swagelok valves, which permit a determination of the atmosphere within the MSB before the removal of the structural and shield lids. If the atmosphere within the MSB is helium, then operations should proceed normally, with fuel removal, either via the transfer cask or in the pool. However, if air is present within the MSB, then appropriate filters should be in place to permit the flushing of any potential airborne radioactive particulate from the MSB, via the Swagelok valves. This action will protect both personnel and the operations area from potential contamination. For the accident case, personnel protection in the form of respirators or supplied air should be considered in accordance with the licensee's Radiation Protection Program.

2. A procedure shall be developed for the documentation of the characterizations performed to select spent fuel to be stored in the MSB. This procedure shall include a requirement for independent verification of each fuel assembly selection.

3. A procedure shall be developed for two independent determinations (two samples analyzed by different individuals) of the boron concentration in the water of the spent fuel pool and that used to fill the MSB cavity.

4. In preparing written operating procedures for handling the MSB over the VCC, the user shall include a consideration for reducing the likelihood of fracturing the ceramic tiles at the bottom of the VCC, as the MSB is lowered into position.

1.1.3 Quality Assurance

Activities at the independent spent fuel storage installation (ISFSI) shall be conducted in accordance with the requirements of 10 CFR Part 50 , Appendix B.

1.1.4 Heavy Loads Requirements

Lifts of the MSB in the multi-assembly transfer cask (MTC) must be made

RADIOACTIVE WASTE MANAGEMENT ASSOCIATES

Telefax Cover Sheet

To: Denise Chancellor

From: Marvin Resnikoff

Date: 1/16

Comments:

Denise:
I called Fed Ex and the package we sent last night will not arrive today. They will deliver on Monday. We've had two glitches with Fed Ex and both have involved Salt Lake City. I hope this isn't an omen. But I've attached the signed declaration and four pages of the Certificate of Compliance.
Marvin

Number of Pages Including Cover Sheet: 6
For Return Messages, send to FAX #: (212)620-0518

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