



SMUD

SACRAMENTO MUNICIPAL UTILITY DISTRICT P. O. Box 15830, Sacramento CA 95852-1830, (916) 452-3211
AN ELECTRIC SYSTEM SERVING THE HEART OF CALIFORNIA

DAGM/NUC 94-048

March 10, 1994

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

Docket No. 72-11
Rancho Seco Independent Spent Fuel Storage Installation
RANCHO SECO TRANSPORTABLE STORAGE CASK MANAGEMENT STRATEGY

Attention: Charles Haughney

As a result of our meeting with you and your staff on January 25 and 26, 1994, I believe it is important to further explain SMUD's approach to Multi-Purpose (storage/transport) Cask management for the storage and disposition of Rancho Seco's spent nuclear fuel. Although SMUD's cask management strategy is generally discussed in the 10 CFR 72 Safety Analysis Report that was submitted to the NRC in October 1994, I want to explain our strategy in greater detail to alleviate any misunderstandings in the future. SMUD is currently planning the decommissioning of the Rancho Seco Nuclear Generating Station, and intends to make full use of it's investment in the Multi-Purpose Casks, including onsite mitigation of postulated "off-normal" storage conditions.

As you are aware, SMUD currently has two Multi-Purpose Casks on order from Vectra Technologies Inc. (formally Pacific Nuclear). SMUD will retain permanent title to one of the casks until all spent fuel is transported offsite. However, title to the second cask may be transferred to the Department of Energy. The actual schedule for title transfer will depend on the successful negotiation of a cooperative agreement for a proposed SMUD/DOE joint demonstration program, which may require up to six months from the date of this letter. Transfer of the second cask's title to DOE will be conditional, including SMUD's right at any time to recall and use the cask at Rancho Seco for mitigation of an off-normal storage condition.

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There are three roles that the casks will play in Rancho Seco's spent fuel disposition program. These roles, and our planned use of the casks are described below.

Role 1: Spent Fuel Off-Load and Storage - During the fuel transfer campaign, spent fuel will be transferred from the spent fuel pool to seal welded canisters for dry storage at an Independent Spent Fuel Storage Installation (ISFSI). Only one cask, serving as an onsite canister transfer cask, will be required. In the event of an off-normal event during this activity, the suspect canister will be returned to the spent fuel pool for inspection and possible reload. During this activity the second cask may be used elsewhere. The spent fuel pool will be abandoned and subsequently decommissioned, after the last spent fuel assembly has been transferred to the ISFSI.

Role 2: Spent Fuel Storage - During passive, dry storage, which could last well after plant decommissioning, the canistered spent fuel will remain stored in Horizontal Storage Modules (HSMs) at the ISFSI. During this period, the SMUD cask may not be dedicated onsite. Any offsite use of the SMUD cask will be contingent on an unconditional sixty day return to Rancho Seco. Additionally, during this period DOE will have title to the second cask, which will also be contingent on an unconditional sixty day return provision.

In the event of an off-normal event, one or both casks will be returned to Rancho Seco for mitigation. Mitigation may include transport of the off-normal canister to a federal facility (if existing), transport to another utility's spent fuel pool for repackaging, or onsite storage in the cask serving to isolate a breached canister from the environment. During the time the cask is being retrieved, SMUD will install a Negative Air Pressure/HEPA Filter Device in the HSM. The negative air pressure filter device will control and contain radiological emissions from the off-normal canister until the cask returns to the site. Prior to the actual cask retrieval, support equipment will be checked-out and personnel mobilized. Four to six weeks may be required for this activity.

Furthermore, if the SMUD cask is used in its storage mode for a period in excess of one year, an additional cask or overpack device will be placed on order. SMUD will retain onsite control of the DOE cask until the new cask or overpack device is received on-site.

Role 3: Preparation For Cask/Canister Transport: During this activity, the canister will be withdrawn from the HSM into a cask and loaded onto a railcar for transport to a federal facility. DOE is contractually obligated to deliver a "compatible" spent fuel cask to the Rancho Seco site for transport. The compatible cask may be the "second" SMUD cask, now owned by DOE, or another cask subsequently purchased by DOE. The SMUD owned cask

will be onsite at any time a spent fuel canister is accepted by DOE, loaded into a cask, and onto an associated railcar. Based on DOE's current Acceptance Priority Ranking (APR) schedule, Rancho Seco's spent fuel will be accepted at various intervals over a fourteen year period.

The SMUD cask will serve to mitigate an off-normal event during the loading process. Mitigation could include transfer of a suspect canister into the cask for continued storage, off site transfer to another utility's spent fuel pool for reload, or transport to a DOE facility, if available. If the SMUD cask is used for canister storage in excess of one year, an additional cask or overpack will be ordered.

I sincerely hope this explanation has clarified SMUD's Multi-Purpose Cask management strategy. Members of your staff with questions requiring additional information or clarification may contact Ken Miller at 916/452-3211, extension 4513.

Sincerely,



James R. Shetler
Deputy Assistant General Manager
Operations

cc: K. Perkins, NRC, Walnut Creek