

May 30, 1997

FOR: The Commissioners

FROM: L. Joseph Callan /s/  
Executive Director for Operations

SUBJECT: ANNUAL REPORT ON THE STATUS OF PREMATURELY SHUT DOWN PLANTS

## PURPOSE:

To inform the Commission of the status of open issues and the progress of specific facilities toward decommissioning. The last report was sent to the Commission on April 24, 1996.

## BACKGROUND:

In COMJC-92-002 of March 3, 1992, the Commission directed the staff to submit quarterly reports on the status of pending licensing and regulatory actions for prematurely shut down plants. In accordance with the staff's notification to the Commission in SECY-95-087, the staff is submitting the report annually.

## DISCUSSION:

- I. Rulemaking Activities
- II. Integrated Decommissioning Inspection Program
- III. Current Plant Status
  - A. Rancho Seco
  - B. Yankee Rowe
  - C. San Onofre Unit 1
  - D. Trojan
  - E. Indian Point Unit 1
  - F. Humboldt Bay
  - G. Dresden 1
  - H. Haddam Neck

## I. Rulemaking Activities

Throughout fiscal years 1995 and 1996, the NRC staff worked on revisions to NRC regulations to clarify their applicability and to make certain changes in decommissioning policy regarding permanently shut down reactors. On July 2, 1996, the Commission approved the final rule. The rule was published in the *Federal Register* on July 29, 1996, and became effective on August 28, 1996. The final rule redefines the decommissioning process, defines terminology related to decommissioning, requires licensees to provide the NRC with early notification of planned decommissioning activities at their facilities, and explicitly sets forth the applicability of certain NRC requirements to reactors that are permanently shut down.

The primary change that the rule implements is that a licensee is no longer required to submit a decommissioning plan for NRC approval before undertaking major decommissioning activities. Under the revised rule, a licensee is able to begin decommissioning after certain criteria have been met. Specifically, the licensee must provide two certifications to the NRC: (1) the reactor has been permanently shut down and (2) all spent fuel has been removed from the reactor. The licensee must also submit a post-shutdown decommissioning activities report (PSDAR), in which it describes its proposed activities to the NRC. The rule imposes a mandatory 90-day period to allow the NRC staff to evaluate the PSDAR and to hold a public information meeting in the vicinity of the site. After the 90-day period, licensees are permitted to undertake decommissioning activities that meet the requirements of 10 CFR 50.59. Pursuant to the rule, previously submitted or approved decommissioning plans are considered to be the PSDAR for a facility.

The potential deregulation of the power generating industry has created uncertainty with respect to whether current NRC regulations concerning decommissioning funding will require modification to account for utility reorganization not contemplated when the current financial regulations were promulgated, and in particular, to address premature shut downs. On April 8, 1996, the Commission published in the *Federal Register* an advance notice of proposed rulemaking (ANPR) regarding financial assurance requirements for decommissioning nuclear power plants. The *Federal Register* notice invited public comment on issues pertaining to the form and content of the NRC's nuclear power reactor decommissioning financial assurance requirements as they relate to electric utility deregulation. The staff has developed a proposed rule that addresses comments received on the ANPR. The proposed rule is in staff concurrence.

## II. Integrated Decommissioning Inspection Program

In light of the revised Commission regulations for decommissioning power reactors, the staff reviewed the regional implementation of the inspection programs of the Offices of Nuclear Reactor Regulation (NRR) and Nuclear Material Safety and Safeguards (NMSS) for power reactors that have permanently ceased operation. In order to foster a coordinated assessment of licensee performance at these facilities, the staff is developing a single decommissioning inspection program to combine inspection elements from the NRR and NMSS inspection programs. We believe that this initiative will

contribute to consistency of inspection, efficiency in project management oversight, and elimination of duplicative staff effort. Final program and inspection procedure comments from the regions are being incorporated and program implementation is expected around June 1997.

### III. Current Plant Status

#### A. RANCHO SECO

Under its SAFSTOR decommissioning plan, the Sacramento Municipal Utility District (SMUD) plans to transfer the spent fuel from the Rancho Seco Nuclear Generating Station spent fuel pool to an onsite independent spent fuel storage installation (ISFSI) licensed separately by NMSS under 10 CFR Part 72. SMUD does not expect to begin to transfer fuel to the ISFSI until late calendar year 1998.

In late 1994, SMUD informed the NRC that it had begun a reevaluation of decommissioning methods different from the long-term SAFSTOR decommissioning plan approved by the NRC. In January 1997, SMUD completed its reevaluation and is now considering changing from SAFSTOR to a dismantlement alternative. The licensee will undertake some limited dismantlement of mildly radioactive systems consistent with its decommissioning plan, which is now considered a PSDAR, and will evaluate the effectiveness and cost of dismantlement before deciding to change decommissioning alternatives. Currently, the licensee is dismantling secondary plant systems located in the turbine building.

The NRC staff is reviewing a license amendment request to conform the Technical Specifications (TS) to revised 10 CFR Part 20 requirements and another amendment request to update the spent fuel shipping cask licensing basis before fuel from the spent fuel pool is moved to the ISFSI.

#### B. YANKEE ROWE

On October 28, 1996, the NRC staff informed Yankee Atomic Electric Company, licensee for Yankee Nuclear Power Station, that decommissioning activities may be conducted at Yankee Rowe. The letter conveying this information was the culmination of a lengthy hearing process that had followed the NRC's approval of Yankee Rowe's decommissioning plan on February 14, 1995. Approval of the plan was rescinded in response to a decision of the United States Court of Appeals for the First Circuit to a petition filed by the Citizens Awareness Network (CAN), a public interest group based in the Rowe community. The First Circuit decision and CAN intervention were discussed in the report of April 24, 1996.

In February 1996, the staff issued a transportation certificate of compliance for a reactor vessel (RV) storage or shipping cask. On April 27, 1997, the RV was moved on local roads by way of a special purpose transportation vehicle to a rail line for shipment and burial at Barnwell, South Carolina.

#### C. SAN ONOFRE UNIT 1

San Onofre Nuclear Generating Station, Unit 1 (SONGS 1), continues to conduct activities in accordance with its permanently defueled Technical Specifications (PDTS), which were approved in December 1993. Southern California Edison Company (SCE), the licensee for SONGS 1, submitted the SONGS decommissioning plan in November 1994, in which it proposed the SAFSTOR decommissioning alternative. Southern California Edison Company intends to dismantle Unit 1 simultaneously with Units 2 and 3 beginning in 2013. During the reporting period, the staff issued one licensing amendment, which made administrative and editorial changes to the PDTS.

Spent fuel from Unit 1 is being stored in all three spent fuel pools. Although the decommissioning plan, now considered to be the PSDAR, indicates that SCE may move the fuel to an alternative onsite storage facility as early as 1998, the licensee has not yet submitted any licensing action requests related to an ISFSI.

#### D. TROJAN

The Trojan Nuclear Plant is undergoing dismantlement. The licensee, Portland General Electric Company (PGE), proposed on March 31, 1997, to remove the RV, fill the vessel with concrete for shielding and to fix contamination, and ship the vessel (which will serve as its own shipping container) to the U.S. Ecology low-level waste site at Hanford, Washington. The staff is reviewing this proposal.

The licensee intends to store the spent fuel in an onsite ISFSI licensed under 10 CFR Part 72. Portland General Electric Company chose the Sierra Nuclear TranStor storage, which utilizes a ventilated concrete cask and a welded steel basket. The PGE 10 CFR Part 72 license request is being reviewed by the NRC staff. The licensee intends to begin movement of fuel from the spent fuel pool to the ISFSI in 1998.

#### E. INDIAN POINT UNIT 1

As stated in the report of April 24, 1996, on January 31, 1996, the staff, after notifying the Commission, issued an order approving the SAFSTOR decommissioning plan (now considered to be the PSDAR) for Indian Point Unit 1. Unit 1 will remain in SAFSTOR until Unit 2 is shut down, after which the licensee, Consolidated Edison Company of New York, intends to dismantle both units.

#### F. HUMBOLDT BAY

The facility remains in a SAFSTOR status, with spent fuel stored in the spent fuel pool. The licensee is experiencing inleakage of groundwater into the reactor sump inside the containment building. In November 1996, the licensee hired a contractor to locate the areas of inleakage and to make repairs. The effort is scheduled to be completed by mid-1997.

The NRC performs inspections at Humboldt Bay several times each year. At the next inspection, the staff plans to observe the licensee's efforts to locate areas of inleakage and make repairs.

#### G. DRESDEN 1

Activities continue in accordance with an approved SAFSTOR decommissioning plan, which is now considered to be the facility's PSDAR. Commonwealth Edison Company (ComEd) intends to maintain Unit 1 in SAFSTOR until Units 2 and 3 of the Dresden Nuclear Power Station are ready for decommissioning. Dismantlement could begin as early as 2010.

The NRC staff is reviewing a license amendment request to conform the Unit 1 TS to the Unit 2 and 3 TS. The amendment will also transfer corporate responsibility from the ComEd Chief Nuclear Officer to the Senior Vice President for Corporate Services. This change will create a separate corporate

focus on decommissioning activities while allowing the Nuclear Operations Division to focus on operating plant safety and performance.

The licensee intends to store the spent fuel in an onsite ISFSI licensed under 10 CFR Part 72. ComEd chose the Holtec International Hi-Star 100 multi-purpose canister for the dry cask storage project. The Holtec certificate of compliance request is being reviewed by the NRC staff. The licensee plans to begin movement of fuel from the spent fuel pool to the ISFSI in the summer of 1998.

#### H. HADDAM NECK

On December 5, 1996, Connecticut Yankee Atomic Power Company announced permanent cessation of operations and permanent removal of fuel from the RV at the Haddam Neck Plant. The NRC conducted a public meeting in Haddam, Connecticut, on January 15, 1997, to explain the decommissioning process to the local community.

The licensee has informed the NRC that it intends to submit the PSDAR in August 1997. The licensee has not provided to the NRC the decommissioning alternative it plans to pursue.

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