Docket No. 50-206



March 14, 1994

FACILITY: San Onfre Nuclear Generating Station, Unit 1

SUBJECT:

SUMMARY OF MEETING HELD ON MARCH 9, 1994, TO DISCUSS THE PROPOSED DECOMMISSIONING PLAN FOR SAN ONOFRE UNIT 1

On March 9, 1994, NRC staff members met at Rockville, Maryland, with employees of Southern California Edison (SCE or the licensee) to discuss the proposed decommissioning plan for the San Onofre Nuclear Generating Station, Unit 1 (SONGS 1). A list of attendees is included as Enclosure 1. The handout used by SCE at the meeting is included as Enclosure 2.

The required submittal date for the proposed decommissioning plan is November 30, 1994, two years from the time of final shutdown. The licensee indicated that the proposed decommissioning plan refers to the period during which the spent fuel remains in the Unit 1 spent fuel pool as Phase I of the SAFSTOR period. The period following the anticipated transfer of the fuel from the Unit 1 spent fuel pool in approximately 1998 is referred to as Phase II. The proposed decommissioning plan anticipates that SONGS 1 will be maintained in SAFSTOR until 2013, when it will be dismantled concurrently with the collocated San Onofre Nuclear Generating Station, Units 2 and 3.

In its presentation, the licensee provided an item-by-item discussion of each of the topics contained in the "Decommissioning Plan Highlights/Contents" portion of Enclosure 2. The meeting provided an effective forum for the staff to provide to the licensee feedback and clarifications of staff expectations for the decommissioning plan. The staff indicated that it would provide to the licensee information regarding radiological site characterization for multi-plant sites.

Original signed by:

Michael K. Webb, Acting Project Manager Non-Power Reactors and Decommissioning Project Directorate Division of Operating Reactor Support Office of Nuclear Reactor Regulation

Enclosures: As stated

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cc w/enclosures: See next page DISTRIBUTION Docket File 50-206 LReyes MWebb SBrown JMitchell NRC PDRs **BGrimes** EHvlton LBell Region V ONDD r/f SWeiss OGC MMasnik WRusse]]/FMiraglia EJordan ACRS (10) RDudley ONDD:SC ONDD:/LA ONDD: PM mw EKK/Kton MWebb:dmj RDudlev SWeiss 3/17/94 3/14/94 3/\&/94 3/)4/94 OFFICIAL RECORD COPY DOCUMENT NAME: C:\AUTOS\SAN ONFR\3/9MS.MW NRC FILE CENTER COF 160059



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

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muchael & Webb

Michael K. Webb, Acting Project Manager Non-Power Reactors and Decommissioning Project Directorate Division of Operating Reactor Support Office of Nuclear Reactor Regulation

Enclosures: As stated

cc w/enclosures: See next page Mr. Harold B. Ray Southern California Edison Company San Onofre Nuclear Generating Station, Unit 1 Docket No. 50-206

#### cc:

Mr. R. W. Krieger, Vice President Southern California Edison Company San Onofre Nuclear Generating Station P. O. Box 128 San Clemente, California 92674-0128

Mr. Robert G. Lacy Manager, Nuclear Department San Diego Gas & Electric Company P. O. Box 1831 San Diego, California 92112

Resident Inspector/San Onofre NPS c/o U.S. Nuclear Regulatory Commission P. O. Box 4329 San Clemente, California 92674

Mayor City of San Clemente 100 Avenida Presidio San Clemente, California 92672

Chairman, Board of Supervisors County of San Diego 1600 Pacific Highway, Room 335 San Diego, California 92101

Regional Administrator, Region V U.S. Nuclear Regulatory Commission 1450 Maria Lane, Suite 210 Walnut Creek, California 94596

Mr. Steve Shu Radiologic Health Branch State Department of Health Services P. O. Box 942732 Sacramento, California 94234

Mr. Don J. Womeldorf
Chief, Environmental Management Branch
California Department of Health
Services
714 P. Street, Room 616
Sacramento, California 95814

Mr. Richard J. Kosiba, Project Manager Bechtel Power Corporation 12440 E. Imperial Highway Norwalk, California 90650

**ENCLOSURE 1** 

#### SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 1

#### PROPOSED DECOMMISSIONING PLAN MEETING

#### MARCH 9, 1994

#### **ATTENDEES**

#### <u>NAME</u>

#### ORGANIZATION

Tony Llorens Jose Perez Valerie Hubbard Larry Bell Stewart Brown Michael Masnik Michael Webb

SCE SCE Winston & Straun NRC/NMSS NRC/NRR NRC/NRR

# SAN ONOFRE NUCLEAR GENERATING STATION UNIT 1

# **PROPOSED DECOMMISSIONING PLAN**

**MARCH 9, 1994** 

# **OVERVIEW**

- Status of Plant
- Status of Decommissioning Plan
- Decommissioning Plan Highlights/Contents
- Environmental Report
- Other Licensing Issues

# STATUS OF THE PLANT

- Plant equipment is lined up for SAFSTOR configuration
- Sold Dedicated Safe Shutdown Diesel
- Soliciting bids for Emergency Diesels
- PDTS implemented February 14, 1994
- Revised Emergency Plan in effect March 1, 1994

# **STATUS OF DECOMMISSIONING PLAN**

- First draft developed
- Review and comment cycle underway
- Due to the NRC by November 30, 1994
- Focuses on transition and maintaining plant in SAFSTOR

## **1.0 OVERVIEW**

#### 1.1 Background

- 1.1.1 Introduction
- 1.1.2 Site Description
  - 1.1.2.1 Topography
  - 1.1.2.2 Geology and Seismology
  - 1.1.2.3 Meteorology and Climatology
  - 1.1.2.4 Hydrology
  - 1.1.2.5 Ecology
  - 1.1.2.6 Historical and Archeological
- 1.1.3 Site History
- 1.2 Organization of the Decommissioning Plan
- 1.3 Facility Description
- 1.4 Decommissioning Plan Revision Process

## 2.0 CHOICE OF DECOMMISSIONING ALTERNATIVES

2.1 Decommissioning Alternatives

- 2.1.1 Alternative Selection and Justification
- 2.1.2 Description of Plant Shutdown
- 2.1.3 Description of SAFSTOR
- 2.1.4 Description of Deferred-DECON, Dismantling, and Site Restoration
- 2.2 Decommissioning Activities, Task, and Schedules
  - 2.2.1 Plant Shutdown and Defueling
    - 2.2.1.1 Activities and Tasks
    - 2.2.1.2 Decontamination Required
    - 2.2.1.3 Plant Modifications Required
    - 2.2.1.4 Systems Required for Ultimate Dismantling
  - 2.2.2 SAFSTOR Period
    - 2.2.2.1 Activities and Tasks
    - 2.2.2.2 Maintenance of Systems Required to be in Operation
    - 2.2.2.3 Monitoring of Plant/Personnel
    - 2.2.2.4 Long Term Spent Fuel Storage

## 2.0 CHOICE OF DECOMMISSIONING ALTERNATIVES(Con't)

2.2.3 Decontamination and Dismantling

- 2.2.3.1 Decontamination of Structures, Systems, and Components
- 2.2.3.2 Removal of Structures, Systems, and Components
- 2.2.3.3 Process for Control, Processing, and Disposal
- 2.2.4 Radiation Exposure Summary
- 2.3 Organization and Responsibilities
  - 2.3.1 SAFSTOR Period
  - 2.3.2 Dismantling Period
- 2.4 Training Program
  - 2.4.1 Scope of Training
  - 2.4.2 General Employee Training
  - 2.4.3 Radiation Protection/Chemistry Technician Training

## 2.0 CHOICE OF DECOMMISSIONING ALTERNATIVES(Con't)

2.4.4 Operator Training

2.4.4.1 Non-Certified Operator Training 2.4.4.2 Certified Operator Training

- 2.4.5 Maintenance Training
- 2.4.6 Trainer Qualifications
- 2.4.7 Training Records
- 2.5 Contractor Assistance

# 3.0 PROTECTION OF OCCUPATIONAL HEALTH & SAFETY

- 3.1 Facility Radiological Status
  - 3.1.1 Operating History
  - 3.1.2 Current Radiological Status
  - 3.1.3 Radionuclide Inventory
    - 3.1.3.1 Plant Systems
    - 3.1.3.2 Structural Feature Contamination
    - 3.1.3.3 Spent Fuel Pool
    - 3.1.3.4 Reactor Vessel and Internals
    - 3.1.3.5 Plant Area Soils Contamination

#### 3.2 Radiation Protection

- 3.2.1 ALARA Program
- 3.2.2 Radiation Protection Program
- 3.3 Radioactive Waste Management
  - 3.3.1 Spent Fuel Disposition
  - 3.3.2 Radioactive Waste Volume
  - 3.3.3 Radioactive Waste Processing
  - 3.3.4 Radioactive Waste Disposal

## **3.0 PROTEC. OF OCCUPATIONAL HEALTH & SAFETY (Cont)**

3.4 Accident Analysis

3.4.1 SAFSTOR Accident Analysis

- 3.4.1.1 Loss of Offsite Power
- 3.4.1.2 Fuel Handling Accident

3.4.1.3 Other Applicable UFSAR Events, Natural Phenomena, Fires

3.4.2 Dismantlement Accident Analyses

3.5 Occupational Safety

3.6 Non-Radioactive Waste Management

3.6.1 Hazardous Materials

3.6.2 Non-radioactive Effluent Controls

3.6.3 Hazardous Waste Disposal

3.6.4 Salvaged/Recycled Material

## 4.0 PROPOSED FINAL RADIATION SURVEY

- 4.1 Proposed Residual Radioactivity Limits
- 4.2 Final Site Survey Plan

## 5.0 COST ESTIMATE

- 5.1 Decommissioning Cost Estimate
- 5.2 Cost Estimate Methodology
  - 5.2.1 Activity-Dependent Costs
  - 5.2.2 Period Dependent Costs
  - 5.2.3 Undistributed Costs
  - 5.2.4 Contingency
  - 5.2.5 Decommissioning Schedule Estimate
  - 5.2.6 Radioactive Waste Estimate
- 5.3 Decommissioning Funding
  - 5.3.1 Certificate of Financial Assurance
  - 5.3.2 Decommisioning Trust Fund

## 6.0 TECHNICAL/ENVIRONMENTAL SPECIFICATIONS

- 6.1 Permanently Defueled Technical Specifications
- 6.2 Environmental
  - 6.2.1 Characteristics of the Site
  - 6.2.2 Radioactive Effluents Control
  - 6.2.3 Radiological Environmental Monitoring Program
  - 6.2.2 Site Boundary Dose Control Program

## 7.0 QUALITY ASSURANCE PROVISIONS IN PLACE DURING DECOMMISSIONING

## 8.0 PHYSICAL SECURITY IN PLACE DURING DECOMMISSIONING

- 8.1 SAFSTOR
- 8.2 Dismantling

# **ENVIRONMENTAL REPORT**

- Preparing draft
- Guidance for preparation
  - 10CFR51.53 and 51.45
  - NUREG-0586
  - Environmental Reports for Yankee, Rancho Seco and Dresden 1
- Similar to Decommissioning Plan

# **OTHER LICENSING**

- Decommissioning Plan will provide NRC with basis for evaluating our funding and collection (10CFR50.82)
- Recordkeeping requirements
- Extension of Operating (Possession Only) License beyond 2004 expiration date.