

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report No. 50-312/85-13

Docket No. 50-312

License No. DPR-54

Licensee: Sacramento Municipal Utility District  
P. O. Box 15830  
Sacramento, California 95813

Facility Name: Rancho Seco Unit 1

Inspection at: Herald, California (Rancho Seco Site)

Inspection Conducted: May 4-31 and July 15-19, 1985

Inspectors: C. J. Myers for  
J. H. Eckhardt, Senior Resident Inspector

7-29-85  
Date Signed

C. J. Myers for  
G. P. Perez, Resident Inspector

7-29-85  
Date Signed

Approved By: C. J. Myers for  
L. F. Miller Jr., Chief  
Reactor Projects Section 2

7-29-85  
Date Signed

Summary:

Inspection between May 4-31 and July 15-19, 1985 (Report No. 50-312/85-13)

Areas Inspected: This routine inspection by the Resident Inspectors involved the areas of operational safety verification, maintenance, refueling, and surveillance activities. During this inspection, Inspection Procedures 61726, 62703, 71707, 71711, 71710 and 92706 were covered. This inspection involved 152 hours onsite by two resident inspectors.

Results: Of the areas inspected, no violations or deviations were identified.

## DETAILS

### 1. Persons Contacted

P. Oubre', Manager of Nuclear Operations  
G. Coward, Plant Superintendent  
\*N. Brock, Electrical/I&C Maintenance Supervisor  
H. Canter, QA Engineer  
\*R. Colombo, Regulatory Compliance Supervisor  
S. Crunk, Associate Nuclear Engineer  
\*J. Field, Engineering and Quality Control Superintendent  
J. Jurkovich, Site Resident Engineer  
\*F. Kellie, Assistant Chemical and Radiation Superintendent  
\*R. Lawrence, Mechanical Maintenance Supervisor  
\*C. Linkhart, Senior Electrical Engineer  
\*R. Miller, Chemistry and Radiation Protection Superintendent  
\*S. Redeker, Shift Technical Advisor Supervisor  
L. Schwieger, Quality Assurance Director  
\*W. Spencer, Operations Superintendent

Other licensee employees contacted included technicians, operators, mechanics, security and office personnel.

\*Attended the Exit Meeting on May 31, 1985.

### 2. Operational Safety Verification

At the commencement of this report period the plant was in cold shutdown, in continuation of a ninety day outage. The inspectors observed portions of the following outage related work:

- ° Diesel generator maintenance activities
- ° Feedwater heater repairs
- ° Steam generator work including, tube pulling, tube plugging and the systems drip test
- ° Steam generator feedwater nozzle replacement
- ° Main feedwater flow nozzle replacement
- ° Local leak rate testing of reactor building penetrations
- ° Auxiliary boiler repairs
- ° Condenser repairs

During the report period, the inspectors observed control room operations, reviewed applicable logs, and conducted discussions with control room operators. The inspectors verified from the control room that the appropriate decay heat removal requirements were being met. The inspectors also verified that surveillance tests required during the shutdown were accomplished and reviewed clearance records. Tours of the auxiliary building, turbine building, and reactor building, including exterior areas, were made to assess equipment conditions and plant conditions. Also the tours were made to assess the effectiveness of radiological controls and adherence to regulatory requirements. This included reviews of Radiation Work Permits for completeness, protective clothing requirements, and verification that workers understood the requirements. The inspector reviewed selective dosimetry cards for

accuracy of the recorded dose and of the accumulative dose. The inspectors also observed plant housekeeping/cleanliness conditions, looked for potential fire and safety hazards, and observed security and safeguards practices.

No violations or deviations were identified.

### 3. Analysis of the Light Cover Inadvertantly Lost in Reactor Vessel

An underwater light cover came loose during refueling operations (Inspection Report 50-312/85-08). The licensee performed drift tests in the refueling cavity and determined the most probable location for the cover was in the reactor vessel. With the use of underwater video equipment, the cover was located, in several pieces, in the bottom of the reactor vessel. Due to the extreme difficulty to remove the cover, the licensee contracted to have tests performed on a similar cover and determine if the cover could adversely affect plant operations. It was found that the cover would melt and disintegrate rapidly during plant heatup. The light cover would degrade mostly to carbon dioxide, hydrogen, and methane. Due to the small mass of the light cover, the byproducts are not expected to interfere with reactor operation and should be removed through the reactor cleanup system. Therefore, the licensee will allow the cover to remain in the vessel and allow the cover to disintegrate during plant startup.

The plant operated from June 14 to June 18, 1985. Subsequent to this operating period, the inspector reviewed the primary chemistry data and no adverse affects were observed due to this foreign material. This item is considered to be closed.

No violations or deviations were identified.

### 4. Surveillance Activities

The inspector observed the performance of portions of local leak rate testing (LLRT) performed per Technical Specifications at each refueling interval. The inspector verified that testing was performed in accordance with approved procedures, that test criteria were met, and that pressure gauges used were in calibration. The inspector also walked down portions of valve lineups for tests in progress and lineups in the as-left conditions. No discrepancies were noted.

The licensee reported via a four hour report that the reactor coolant system drain header penetration, no. 73, had failed its LLRT. The leakage calculated was 252,384 sccm (standard cubic centimeters), while the Technical Specification limit is 106,000 sccm. At the close of the inspection, the licensee was repairing a safety features valve which appeared to be the major contributor. The results of the repair and further testing will be reported in a future report. This is considered an open item (50-312/85-13-01).

No violations or deviations were identified.

### 5. Maintenance

The inspectors reviewed work performed on equipment included in the Equipment Qualification (EQ) program. On May 19, 1985, while calibrating a reactor building pressure switch, PSH-53619, the switch would not hold pressure. The licensee removed the switch and wrote a work request, no. 99588, to replace the switch. The inspector noted that the work request was appropriately marked 'H', signifying EQ equipment, as per licensee's procedures. The pressure switch was repaired, bench tested, calibrated and installed. Through interviews conducted with members of the Instrumentation and Control staff, the inspector found that the work appeared not to have compromised the environmental qualification of the pressure switch.

No violations or deviations were identified.

#### 6. Control Room Modifications

During the outage, extensive changes to the control room were made to improve the habitability and efficiency. The following is a list of the major changes:

- a. Repainting of the control room panels.
- b. Repainting of the control room walls and shift supervisors office walls and installing wallcovering on the back wall of the control room.
- c. Removal of a portion of the west wall of the control room and creating a separate area for handling of clearances and work requests. This eliminates much unnecessary traffic into the control room proper.
- d. Relocating filing cabinets from the control room proper to the newly expanded area.
- e. Establishing an entrance partition to more effectively control entry.
- f. Installing new carpet in the control room.

The inspectors consider that these changes created a much more attractive environment in the control room and will assist in minimizing distractions during both normal operations and maintenance periods. The operators have expressed positive comments concerning the changes.

No violations or deviations were identified.

#### 7. Exit Meeting

The resident inspectors met with licensee representatives (denoted in paragraph 1) at various times during the reporting period and formally on May 31, 1985. The scope and findings of the inspection activities as given in this report, were summarized at the meeting. Licensee representatives acknowledged the inspector's findings.