U. S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION V

Report No. 50-312/80-17

Docket No. 50-312 License No. DPR-54 Safeguards Group ____________

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 1-30, 1980

Inspectors: B. H. Faulkenberry /for 6/17/80
Harvey L. Canter, Senior Resident Inspector Date Signed

Date Signed

Date Signed

Approved By: B. H. Faulkenberry 6/17/80
B. H. Faulkenberry, Chief, Reactor Projects Section 2, Date Signed
Reactor Operations and Nuclear Support Branch

Summary:

Inspection between May 1 and 30, 1980 (Report No. 50-312/80-17)

Areas Inspected: Routine inspections of operations; plant trips; follow-up on items of noncompliance; follow-up on Headquarters requests; and, independent inspection effort. The inspection involved 76 inspector-hours by the Senior Resident Inspector.

Results: Of the five areas inspected, no items of noncompliance or deviations were identified.

RV Form 219 (2)

8007240420

DETAILS

1. Persons Contacted

[1]R. Rodriguez, Manager, Nuclear Operations
[2,3]P. Oubre', Plant Superintendent
D. Blachly, Mechanical Engineer
N. Brock, Electrical/I&C Maintenance Supervisor
[2,3]Q. Coleman, QA Engineer
[1]R. Colombo, Technical Assistant
[3]G. Coward, Maintenance Supervisor
[3]W. Ford, Operating Supervisor
[2,3]H. Heckart, Engineering Technician
J. Jewett, Senior Quality Assurance Engineer
R. Lawrence, Site Project Engineer
[3]J. McColligan, Mechanical Engineering Supervisor
[3]R. Medina, Quality Assurance Engineer
[3]R. Miller, Chemistry/Radiological Supervisor
[2]L. Schwieger, Quality Assurance Director
[2]J. Sullivan, Quality Assurance Supervisor
D. Whitney, Nuclear Engineer
B. Wichert, Mechanical Engineer

The inspector also talked with and interviewed several other licensee employees, including members of the engineering, maintenance, operations, and quality assurance (QA) organizations.

[1]Denotes those attending the Exit Interview on May 16, 1930.
[2]Denotes those attending the Exit Interview on May 19, 1980.
[3]Denotes those attending the Exit Interview on May 30, 1980.

The following Region V personnel also attended the May 30, 1980 Exit Interview:

B. Faulkenberry, Chief, Reactor Projects Section 2
A. Johnson, Reactor Inspector/Enforcement Coordinator

2. Operational Safety Verification

The inspector observed control room operations, reviewed applicable logs and conducted discussions with control room operators during the month of May 1980. The inspector verified the operability of selected emergency systems. Tours of the auxiliary and turbine buildings were conducted to observe plant equipment conditions, including potential fire hazards, fluid leaks, and excessive vibrations and to verify that maintenance requests had been initiated for equipment in need of maintenance. The inspector by observation and direct interview verified that the physical security plan was being implemented in accordance with the station security plan.

The inspector observed plant housekeeping/cleanliness conditions and verified implementation of radiation protection controls. During the month of May 1980, the inspector walked the accessible portions of the Auxiliary Feedwater System to verify operability.

These reviews and observations were conducted to verify that facility operations were in conformance with the requirements established under technical specifications, 10 CFR, and administrative procedures.

Observations

a. Diesel Generator Time Delays

Time Delays (TDI) in the Engine Control Panels of the two emergency diesel generators were found by the inspector to be of different types. TDI in the "A" diesel was a 2412 PN Agastat, whereas TDI in the "B" diesel was a 7012 PC Agastat. During recent maintenance work performed on the "A" diesel, TDI was replaced with a 7012 PC Agastat, but a record review by the inspector did not indicate that there should have been a difference between the time delays in the two diesels.

The inspector asked the licensee for further information of this issue. This item will be followed-up at a later date (80-17-01).

b. Seismic System Response

During three recent earthquakes of magnitude 6.0 or greater centered near Mammoth Lakes in the East Central part of California, no seismic system alarms were received at Rancho Seco. All three earthquakes were felt by personnel at the site.

The seismic systems at Rancho Seco have a minimum sensitivity of 0.01g in two directions. All instruments have recently been calibrated and made operational. A passive scratch-pad type of peak-recording accelograph was analyzed with no indication noted greater than the minimum readability of .005g.

The inspector asked the licensee if they had contacted the USGS to see if their instrument (on the Rancho Seco property) had been read and analyzed. A licensee representative stated that no such discussions with USGS had been made, but that they would look into the USGS findings.

c. PORV Block Valve

The inspector noted that on May 28, 1980, the PORV block valve was closed. When asked why it had been open since plant startup following refueling outage, a licensee representative stated that since the PORV was reworked during the outage and did not leak, it was felt to be all right to operate with the valve open. Standing Order 3-80 (dated February 15, 1980) allowed operation with the valve open, but on May 28, 1980, the operators decided that by closing the block valve, the effect of a stuck open PORV would be averted.

d. Nuisance Alarms

The following anunciator alarms occur during or after the use of the containment fan coolers. No safety concern exists except for the fact that if these alarms are always energized, the operators may become complacent and neglect to respond to real problems.

i. Core Flood Tank Lo Press Alarms

ii. Reactor Building Emergency Flow Differential High on Reactor Building Emergency Vent Coolers

A licensee representative stated that they will pursue the problem with the Generation Engineering Department. (80-17-02)

No items of noncompliance or deviations were identified.

3. Plant Trips

Following the plant trip on May 30, 1980, at 2:12 PM, due to an electrical fault on buss 2E2, the inspector ascertained the status of the reactor and safety systems by observation of control room indicators and discussions with licensee personnel concerning plant parameters, emergency system status and reactor coolant chemistry. The inspector verified the establishment of proper communications and reviewed the corrective actions taken by the licensee.

All systems responded as expected, and the plant was returned to operation on the evening of May 30, 1980.

No items of noncompliance or deviations were identified.

4. Follow-up on Items of Noncompliance

The response to the items of noncompliance which led to the imposition of a $25,000 civil penalty were examined to ascertain that the corrective measures were completed.

By letter dated April 23, 1980, the licensee responded to three citations in the Notice of Violations attached to IE Inspection Report No. 50-312/80-06.

Five items of noncompliance (Items 80-06-01 through 80-06-05) were discussed in the referenced report, but NRC Headquarters combined the five items into the three items described in the Notice of Violations. All five items are thereby closed (80-06-01 to 80-06-05), as part of this inspection activity.

All corrective actions were verified. Standing Order 5-80 is still in effect which requires dual verification of many procedures included in the response. The guidelines for dual verification for all procedures listed in the response state that the lineups must be performed by two operators/technicians sequentially, each independent of the other. Further information on this item is discussed in the exit interview portion of this report.

No items of noncompliance or deviations were identified.

5. Follow-up on Headquarters Requests

a. Helical Spring Inspection

On May 16, 1980, the inspector was shown a B & W site bulletin discussing a fuel assembly holddown spring problem. Due to broken spring problems at other B & W plants, Rancho Seco instituted an inspection program to see if the problem existed at the site. The helical spring is located in the fuel assembly upper end fitting. It transmits a force from the upper reactor internals to the fuel assembly to counteract normal hydraulic lift, assuring that the fuel assembly stays firmly seated against the lower reactor internals.

Rancho Seco and onsite B & W personnel carefully reviewed core verification video tapes for evidence of broken springs. No broken springs were found. There were two fuel assemblies of which the video tapes were not clear enough to verify the spring's condition.

Sixty-nine discharged fuel assemblies in the spent fuel pool were examined with a video apparatus. No indications of broken springs were noted in this review.

Based on the above information, the licensee reported to B & W that there is no apparent broken holddown spring problem at Rancho Seco.

No items of noncompliance or deviations were identified.

b. Category "A" Requirement Verification

By letter dated May 1, 1980, the NRC informed the licensee of the staff's evaluation for the Rancho Seco Nuclear Generating Station actions taken to satisfy the Category "A" items of NUREG-0578, "TMI-2 Leassons Learned Task Force Status Report and Short-Term Recommendations."

The referenced letter requires the Office of Inspection and Enforcement to verify many actions taken by the licensee and to document the verifications in an appropriate inspection report.

Of immediate concern was the status of four items that were to be substantially complete by the beginning of June 1980.

As of May 30, 1980, the following four items were substantially complete. Due to a reactor trip on the afternoon of May 30, 1980, a slight delay in the final installation of the high range effluent monitors is likely, but the monitors should be installed and tested during the first week in June. Following is a list of the four items by NUREG-0578 paragraph number:

Item 2.1.3.a	Direct Indication of Power Operated Relief Valve and Safety Valve Position. (System is operational.)
Item 2.1.6.a	System Integrity. (A report on the required system leakage was submitted to NRR on May 22, 1980.)
Item 2.1.8.a	Post Accident Sampling. (A report on the design and capabilities of the long-term post accident sampling facility has been submitted.)
Item 2.1.8.b	High Range Effluent Monitors. (Not complete as of this writing.)

No items of noncompliance or deviations were identified.

6. Independent Inspection Effort

Discussions were held between the Senior Resident Inspector and operations, security and maintenance personnel in an attempt to better understand problems they may have which are related to nuclear safety. These discussions will continue as a standard practice.

On numerous occasions, during the month of May, the Senior Resident Inspector attended operations status meetings. These meetings are held by the Operations Supervisor to provide all disciplines onsite witn an update on the plant status and ongoing maintenance work.

In addition to the above, independent inspection effort was performed on the following items:

a. Containment isolation valve operations.

b. Safety grade anticipatory reactor trip.

c. Diesel generator operability and the related technical specification requirements.

No items of noncompliance or deviations were identified.

7. Exit Interview

The inspector met with licensee representatives (denoted in Paragraph 1) throughout the month and at the conclusion of the inspection on May 30, 1980, and summarized the scope and findings of the inspection activities.

Due to questions raised by the Performance Appraisal Team during a recent inspection at Rancho Seco (April 14-25 and May 5-8, 1980), the licensee has asked for a clarification from Region V on the meaning of Technical Specification 6.5.1.6.d. This technical specification states:

> The Plant Review Committee shall be responsible for: ...d. Review of all proposed changes or modifications to plant systems or equipment that affect nuclear safety.

By a letter dated May 6, 1980, from the IE Headquarters, the following interpretation was received:

> The interpretation of this T/S allows for the position of a reviewer (screening engineer) and does not mean that the Plant Review Committee (PRC) conducts the complete design review and analysis of proposed changes. Design changes as used here, means those as defined in the IE Manual pertaining to 10 CFR 50.59. They are "responsible" to see that such design review is accomplished, i.e., program/procedures exist to require the detailed analysis and safety evaluation (if required) be conducted and the results transmitted to the PRC. This does not apply to routine maintenance performed. The PRC can then pass judgement on the proposed change. In the case of Rancho Seco, the PRC would handle all items specifically referred to it by the "screening engineer." The PRC would also review the judgements made by the "screening engineer" on proposed changes to safety related systems and proposed changes that affect nuclear safety prior to implementing the change.

In accordance with this interpretation, the licensee intended to change procedures to remove the screening engineer's function and require the PRC to review all documents that cause change or modification of Class 1 systems, however, Region V has not received a final reading from NRC Headquarters on this issue. Until that time, this item will be pursued as a follow-up item. (80-17-03)

Finally, during a public meeting on May 2, 1980, that was held in Sacramento to give the licensee a public forum to respond to the three items of noncompliance and attendent civil penalty issued in April 1980 (see Paragraph 4 in this report and IE Report 50-312/80-06), Mr. R. C. DeYoung, Deputy Director of the Office of Inspection and Enforcement queried the licensee. He asked if there should be other safety related systems or components which should receive mandatory dual verifications when removing from or placing the systems into service.

Specifically, Mr. DeYoung mentioned the PORV system valving and the hydrogen regeneration system. The licensee's position is that, at present, the list of systems requiring dual verification is adequate. The licensee is not adverse, however, to adding systems to the list in the future if deemed appropriate. For example, when the hydrogen regeneration system and emergency high level sampling systems are completed in the future, these systems are likely candidates for dual verification.