

U. NUCLEAR REGULATORY COMMISSION

REGION V

Report No. 50-312/82-35

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: August 4 to September 14, 1982

Inspectors: Anthony D'Angelo for 9/22/82
Harvey L. Canter, Senior Resident Inspector Date Signed

Anthony D'Angelo for 9/22/82
John O'Brien, Resident Inspector Date Signed

Date Signed

Approved by: Anthony D'Angelo for 9/22/82
Tolbert Young, Chief, Reactor Projects Section Date Signed
#2, Reactor Projects Branch No. 1

Date Signed

Summary:

Inspection between August 4 - September 14, 1982 (Report No. 50-312/82-35)

Areas Inspected: Long term shutdown activities; operational safety verification; maintenance observations; surveillance observations; on-site review committee observations; management meeting; licensee event report follow-up; follow-up on Regional requests; follow-up on Headquarters requests; follow-up on item of noncompliance; and, independent inspection effort. The inspection activities involved 183 inspector-hours by the resident inspectors.

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

DETAILS

1. Persons Contacted

R. Rodriguez, Manager Nuclear Operations
*P. Oubre', Plant Superintendent
D. Blachly, Operations Supervisor
N. Brock, Electrical/I&C Maintenance Supervisor
*R. Colombo, Technical Assistant
G. Coward, Maintenance Supervisor
S. Crunk, Associate Nuclear Engineer
D. Gardiner, Senior Chemical and Radiation Assistant
W. Jurkovich, Site Resident Engineer (Generation Engineering)
F. Kellie, Assistant Chemistry and Health Physics Supervisor
*R. Miller, Chemistry/Radiological Supervisor
J. Newey, Senior Chemical and Radiation Assistant
T. Perry, On-site Quality Assurance Supervisor
J. Price, Surveillance Test Coordinator
S. Rutter, Quality Assurance Engineer
L. Schwieger, Quality Assurance Director
B. Spencer, Shift Supervisor
T. Tucker, Planner/Scheduler
J. Uhl, Mechanical Engineer
D. Whitney, Engineering and Quality Control Supervisor
*B. Wichert, Plant Mechanical Engineer
W. Wilson, Senior Chemical and Radiation Assistant

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

*Denotes those attending the Exit Interview on September 14, 1982.

2. Long Term Shutdown Activities

The plant remained shutdown until August 19, 1982. Final assembly of the new Auxiliary Feedwater System thermal sleeves and riser sections was completed during the first two weeks of this period. Pre-startup testing and hydrostatic testing of the RCS was done prior to the licensee receiving permission (from the NRR office of the NRC) to return to power. The Resident Inspector witnessed the special testing for Auxiliary Feedwater full flow and water hammer conditions. The inspectors also observed control room operations, reviewed applicable logs and conducted discussions with control room operators. The inspectors verified that surveillance tests required during the shutdown were accomplished, reviewed tag-out records, and verified containment integrity. Tours of the Auxiliary 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. Maintenance work requests were verified to have been initiated for equipment maintenance. The inspectors observed plant housekeeping/cleanliness conditions and looked for potential fire hazards. The inspectors, by observation and direct interview, verified that the physical security plan was being implemented in accordance with the station security plan. The inspectors reviewed the licensee's jumper/bypass controls to verify there were no conflicts with technical specifications. Finally, the inspectors witnessed portions of the radioactive waste systems controls associated with radwaste shipments.

No items of noncompliance or deviations were identified.

3. Operations Safety Verification

The plant was taken critical on the swing shift of August 19, 1982. The Resident Inspector observed the plant startup, and verified that conditions required by plant procedures and technical specifications were met. The licensee performed post-startup surveillance testing satisfactorily, and had returned to power by August 21, 1982. The plant experienced less than normal problems with the secondary plant startup. However, plant power output was limited to approximately 95 percent reactor power due to an isolated feedheater string. Minor problems with the auto-stop oil system caused the licensee to unload the turbine-generator three times during the power escalation. The isolated 2B feedheater will be repaired during the next maintenance outage or earlier if found to be necessary. Excessive turbine vibrations on the number 5 bearing is limiting power to about 88 percent so that the feedwater heater problem is secondary as of this writing.

The inspector observed control room operations, reviewed applicable logs and conducted discussions with control room operators. The inspector verified the operability of selected emergency systems, reviewed tagout records and verified proper return to service of affected components. Tours of the Auxiliary building and Turbine building were conducted to observe plant equipment condition, 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 verified that the physical security plan was being implemented in accordance with the station security plan.

The inspector examined plant housekeeping/cleanliness conditions and verified the implementation of radiation protection controls. The inspector also walked down the accessible portions of the auxiliary feed system and emergency power system to verify operability, and witnessed portions of the radioactive waste system controls associated with radwaste barreling.

No items of noncompliance or deviations were identified.

4. Maintenance Observations

The inspectors observed portions of the maintenance activities listed below and verified that work was accomplished in accordance with approved procedures, that work was accomplished by qualified personnel, that provisions for stationing a fire watch to oversee activities involving welding and open flame were complied with and that LCO requirements were met during repair.

- (a) Modification of the 'A' and 'B' diesel fuel oil pumps (P888 A & B).
- (b) Modification of both diesel-generator's annunciators to include the status of output breakers.
- (c) Repair of primary valve RCS-510.
- (d) Final assembly and installation of the Auxiliary Feedwater System thermal sleeves and riser sections.

No items of noncompliance or deviations were identified.

5. Surveillance Observations

The inspectors observed portions of the below listed surveillance testing to verify that the tests were covered by properly approved procedures; that the procedures used were consistent with technical specification requirements; that a minimum crew requirements were met; that test prerequisites were completed; that special test equipment was calibrated and in service; and, that the test results were adequate.

- (a) SP207.02B Hydrotest of RCS following a modification or welding repair
- (b) SP205.02 LLRT of the personnel access hatch cavity and the Emergency hatch cavity
- (c) SP203.02A Quarterly HPI system 'A' loop (P238A)
- (d) SP210.01 Auxiliary feed pump (P-318 Prestartup surveillance)

No items of noncompliance or deviations were identified.

6. On-site Review Committee

The Plant Review Committee (PRC) met in meeting No. 1055 on August 6, 1982. All portions of the Technical Specifications dealing with the functioning of this group were satisfied. Subsequent to the meeting, the Senior Resident Inspector attended a Management Safety Review Committee (MSRC) meeting to discuss a 10 CFR 50.59 item that was debated in the PRC meeting. The MSRC meeting was held on August 13, 1982. The subject under debate was whether the Carbon Dioxide (CO₂) Fire Suppression system at Rancho Seco is a Quality Class 1 system. Documents exist that indicate the system is Class 1 and Class 2 depending on what document one reviews and on what interpretations one chooses to believe. The licensee has certain ideas on the class of this system which may not agree with the NRC's current interpretation. The item will remain unresolved pending clarification of the QA class of Rancho Seco's CO₂ system by NRC sources. (82-35-01).

No items of noncompliance or deviations were identified.

7. Management Meeting

On August 18, 1982, Richard C. DeYoung, Director of the Office of Inspection and Enforcement, Robert H. Engelken, Region V Administrator and James Lieberman, Legal Staff - Office of Inspection and Enforcement visited the site. An informal meeting was conducted with members of the Rancho Seco operational staff. A formal meeting, also attended by the Resident Inspectors, was conducted to allow the licensee to provide comments concerning the pending Civil Penalty dealing with the Emergency Early Warning System installation. The licensee was represented by the utility's General Manager, Chief Engineer, and their staff.

No items of noncompliance or deviations were identified.

8. Licensee Event Report Follow-up (LER)

The Resident Inspectors performed an examination of the following LERs to ascertain whether additional inspection effort or other IE response is warranted, whether corrective action discussed in the licensee's report appears appropriate, and whether the information reported to the NRC appears appropriate, and whether the information reported to the NRC appears to satisfy reporting requirements. In addition, the inspectors attempted to ascertain whether these events involved continued operations in violation of regulatory requirements or license conditions.

The LERs listed below appear to meet the above criteria and require no further follow-up at this time:

81-50-LO	(CLOSED)	SFV-46204 failed to close.
81-53-LO	(CLOSED)	SFV-20577 failed to close fully.
82-01-TO	(CLOSED)	Personnel access hatches both opened simultaneously.
82-10-TO	(CLOSED)	OTSG/Aux. feedwater header modifications.
82-11-LO	(CLOSED)	Containment spray additive check valve failure.
82-15-LO	(CLOSED)	"B" Inverter failure.
82-17-LO	(CLOSED)	RB Polar crane track clip failure.
82-18-LO	(CLOSED)	Snubber failed surveillance test.

No items of noncompliance or deviations were identified.

9. Follow-up on Regional Requests

During the inspection period, personnel from the Region V office of the NRC in Walnut Creek, California, requested information from the Resident Inspectors regarding the operation and maintenance of the Rancho Seco power plant. Information was obtained and transmitted to the Region V office concerning:

- (a) Auxiliary feedwater header modifications.
- (b) Applicable codes and standards committed to by Rancho Seco.
- (c) Meteorological tower operational status.
- (d) Reactor building purging history.

No items of noncompliance or deviations were identified.

10. Follow-up of Headquarter's Requests

During the inspection period, personnel from the Headquarters in Bethesda, Maryland, requested information from the Resident Inspectors about the operation, design and maintenance of the Rancho Seco power plant. Information was obtained and transmitted to the NRC Headquarters concerning:

- (a) Auxiliary feedwater header modifications and testing.
- (b) Meteorological tower operational status.
- (c) High pressure injection (HPI) nozzle repairs and testing.
No items of noncompliance or deviations were identified.

11. Follow-up on Item of Noncompliance

Item 82-08-01 (OPEN): "B" High Pressure Injection Pump and "B" Diesel-Generator were Found to be Inoperable:

The licensee responded to this item in a letter dated August 31, 1982. In that response, the licensee committed to installing white indicator decals on each fault flag for safety-related switchgear, and this corrective action has been verified. In addition, the licensee committed to moving the annunciator function to the "auto start inoperable" alarm. The inspector verified that this modification is complete for both diesel-generator output breakers. Concerning the HPI pump supply breaker, the licensee is planning to install "indicating lights on each safety-related breaker in order to provide the operators with an easily identifiable, positive indication of charging spring position." This modification is to be completed during the next refueling outage so that this item will remain open until the modification is completed.

No further items of noncompliance or deviations were identified.

12. Independent Inspection Effort

Discussions were held between the Resident Inspectors 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 inspection, the Resident Inspectors attended outage/operations status meetings. These meetings are held by the Plant Scheduler/Operations Supervisor to provide all disciplines on-site with an update on the plant status and on-going maintenance work.

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

- (a) Shift Manning requirements vs. proposed rule.
- (b) Nuclear Service Electrical Building construction.

- (c) Letdown Heat Exchanger modification.
- (d) Emergency Lighting modifications.
- (e) New Security system equipment.

No items of noncompliance or deviations were identified.

13. Exit Interview

On September 14, 1982, the inspectors met with the licensee personnel denoted in paragraph 1. The scope of the inspection, the observations and the findings of the inspectors were discussed.