

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report No. 50-361/82-40
50-362/82-33

Docket No. 50-361; 50-362 License No. NPF-10; NPF-15 Safeguards Group _____

Licensee: Southern California Edison (SCE) Company
P. O. Box 800, 2244 Walnut Grove Avenue
Rosemead, California 91770

Facility Name: San Onofre - Unit 2 and Unit 3

Inspection at: San Onofre Site, San Clemente, California

Inspection conducted: November 29, 1982 through December 21, 1982

Inspectors: *D. Kirsch* 1/3/83
JA A. Chaffee, Senior Resident Inspector, Unit 2 Date Signed

Date Signed

Approved by: *D. Kirsch* 1/3/83
D. Kirsch, Chief, Reactor Projects Section 3 Date Signed
Reactor Projects Branch No. 2

Summary:

Inspection on November 29, 1982 through December 21, 1982
(Report Nos. 50-361/82-40, 50-362/82-33)

Areas Inspected: Routine, unannounced resident inspection of Units 2 and 3 Operations Program and Units 2 and 3 Startup Test Program including the following areas: operational safety verification (2 and 3); monthly surveillance observations (2 and 3); testing of pipe support and restraint systems (3), witness of power ascension testing (2); significant events (2); plant trips (2 and 3); reactor protection system test witnessing (3); and independent inspection effort (2 and 3). This inspection involved 55 inspector hours on Unit 2, and 31 inspector hours on Unit 3 for a total of 86 hours by one NRC inspector.

Results: No items of noncompliance or deviations were identified.

DETAILS

1. Persons Contacted - Units 2 and 3

- B. Katz, Technical Manager
- H. Morgan, Operations Manager
- +P. Knapp, Health Physics Manager
- J. Wambold, Maintenance Manager
- M. Short, Project Support Manager
- +W. Moody, Deputy Station Manager
- +P. Croy, Compliance and Configuration Manager
- A. Talley, Material and Administrative Services Manager
- F. Eller, Security Manager
- D. McCloskey, Emergency Preparedness Manager
- J. Curran, Manager, Quality Assurance
- +D. Schone, Units 2 and 3 Operations Quality Assurance Supervisor
- +P. King, Units 2 and 3 Operations Quality Assurance Supervisor
- +C. Horton, Units 2 and 3 Startup Quality Assurance Supervisor
- D. Stonecipher, Units 2 and 3 Nuclear Quality Control Supervisor
- G. Vaslos, Units 2 and 3 Construction Quality Assurance Supervisor (Acting)
- +J. Iyer, Lead Compliance Engineer Units 2 and 3
- +C. Kergis, Lead Quality Assurance Engineer Unit 3
- +E. Gulbrand, Assistant Manager Maintenance
- +P. Pennseyres, STA Supervisor
- +K. O'Conner, Unit 3 Startup Supervisor
- +J. Droste, NSSS Supervisor
- +G. Gibson, Lead Technical Compliance Engineer

The inspectors also interviewed and talked with other licensee employees during the course of the inspection; these included shift supervisors, control room operators, startup engineers, and quality assurance personnel.

+Denotes those persons attending the exit interview on December 17, 1982.

Also present at the December 17 exit interview was R. Pate, Senior Resident Inspector Unit 3.

2. Operational Safety Verification-Units 2 and 3

The inspector observed control room operations, reviewed applicable logs and conducted discussions with control room operators during the inspection. The inspector verified the operability of selected emergency systems, reviewed tagout records and verified proper return to service of affected components. Tours of various plant areas were conducted to observe plant equipment conditions, including potential fire hazards, and excessive vibrations. The inspector also observed protected area access controls and operability of facility egress radiological monitoring equipment. The inspector also observed plant housekeeping/cleanliness controls and noted

some liquid accumulation and residue in several areas, specifically around Unit 2 tank T-105, Unit 3 Boric Acid Make Up pumps and around one Unit 3 coolant charging pump. The inspector also noted that some additional general cleanup was required in the north cable riser room on the 30' level. The licensee's QC organization performed followup inspections of these areas to assure that proper cleanup under the housekeeping program would occur.

No items of noncompliance or deviations were identified.

3. Monthly Surveillance (Units 2 and 3)

The inspector observed portions of the following surveillance activities.

S023-3-3.34 "Turbine Overspeed Protection Valve Operability Test"

S023-II-6.2.1 "Surveillance Requirements for Core Protection Calculator Functional Test"

S023-3-3.43 "Semi-Annual ESF Subgroup Relay Test"

S023-II-1.1 "Surveillance Requirements for Reactor Plant Protection System Channel Functional Test (31 Day Interval)"

The inspector observed that these surveillances were conducted in accordance with the applicable procedure by a knowledgeable individual.

No items of noncompliance or deviations were identified.

4. Testing of Pipe Support and Restraint Systems (Unit 3)

The inspector observed the taking of ambient data for post core hot functional procedure 3HB-102-01. This consisted of taking as found data on several snubbers and restraints. The inspector also discussed with licensee personnel the method used for hangers. No inconsistencies were noted in the taking of ambient data.

No items of noncompliance or deviations were identified.

5. Witness of Power Ascension Testing (Unit 2)

The inspector observed selected portions of the following tests:

2PA-344-12 RCS Calorimetric Flow Measurement

2PA-346-01 Shape Annealing Matrix and Boundary Condition Measurements

During the performance of these tests the inspector verified, on a selected basis, by observation and discussion with licensee personnel, that those portions of the tests observed were conducted using an approved procedure, test equipment was properly calibrated, test data were collected and recorded, and that the tests adequately demonstrated conformance with applicable acceptance criteria.

No items of noncompliance or deviations were identified.

6. Significant Events (Unit 2)

On November 24, 1982 and December 7, 1982, unexpected releases of radioactivity to the radwaste building occurred. The first release occurred due to mechanical failure of a radwaste gas sample pump during offgasing from the Volume Control Tank. The second was caused by a valve lineup problem, again during offgasing from the Volume Control Tank.

Both of these releases to the Radwaste building were small in magnitude (2-5 MPC). In each case the licensee took immediate actions to isolate the release and minimize exposure. In neither case were any technical specification offsite dose limits exceeded.

No items of noncompliance or deviations were identified.

7. Plant Trips (Units 2 and 3)

- a. (Unit 2) On December 12, 1982 at 8:01 a.m. a reactor trip followed by an unexpected plant cooldown due to equipment failure resulted in Engineered Safeguard Features Actuation. The reactor trip appears to have been due to a false Control Element Assembly penalty factor input to the Core Protection Calculator, which generated a DNBR trip.

The unexpected cooldown resulted from failure of the live-steam-to-moisture-separator-reheater isolation valve to close due to loss of control power. Failure of these valves to close resulted in an unexpected nine percent steam load. This trip also appears to have resulted in the failure of Reactor Coolant Pump No. 4 middle and upper seals. The seal failures have resulted in a two week outage to replace seals.

- b. (Unit 3) On December 17, 1982 at 2:10 p.m., while in Mode 5, an initiation of Engineered Safeguard Feature Actuation Signals occurred. The Safety Injection Actuation, Engineered Safeguard Features Actuation, Containment Isolation Actuation and Recirculation Actuation signals were activated. This event is currently undergoing investigation by the licensee. The event appears to have been caused by a transient signal. This initiation had no damaging effect on the plant since plant pressure and temperature remained unchanged.

No items of noncompliance or deviations were identified.

8. Reactor Protection System Test Witnessing - Unit 3

The inspector observed selected portions of the Reactor Protection System preoperational test (3PE-358-01). During the performance of this test the inspector verified, on a selected basis, by observation and discussion with licensee personnel that those portions of the test observed were conducted using an approved procedure, test equipment was properly calibrated, test data were collected and recorded, and that the test adequately demonstrated conformance with applicable acceptance criteria.

No items of noncompliance or deviations were identified.

9. Independent Inspection Effort (Units 2 and 3)

a. Equipment Hatch Door (Unit 3)

The licensee found the equipment hatch door on Unit 3 was not tightly shut while in Mode 6. The licensee has committed to upgrade the administrative controls in this area by March 1, 1983 (82-33-01). Since no irradiated fuel was present during this period, the licensee identified the condition, and the licensee appears to be taking satisfactory corrective actions, no enforcement action will be taken at this time.

b. (Closed) (82-30-05) Housekeeping and Cleanliness Control Station Order S0123-A-130 Revision 0; discrepancies in zone designations

The inspector verified by review of Revision 1 to Station Order S0123-A-130 that the discrepancies previously noted had been corrected. This item is closed.

10. Exit Interview - Units 2 and 3

The inspector met with licensee representatives (denoted in Paragraph 1) on December 17, 1982 and summarized the scope and findings of the inspection.