

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

REGION V

Report No. 50-361/80-12
Docket No. 50-361 License No. CPPR-97 Safeguards Group _____
Licensee: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Facility Name: San Onofre Unit 2
Inspection at: San Diego County, California
Inspection conducted: July 18 to August 15, 1980
Inspectors: *A. D. Johnson* 9/15/80
A. D. Johnson, Reactor Inspector Date Signed
R. J. Pate 9/15/80
R. J. Pate, Senior Resident Inspector Date Signed
A. Chaffee 9/15/80
A. Chaffee, Reactor Inspector Date Signed
Approved By: *B. H. Faulkenberry* 9/16/80
B. H. Faulkenberry, Chief, Reactor Project Section 2, Date Signed
Reactor Operations and Nuclear Support Branch

Summary:

Inspection on July 18-August 15, 1980 (Report No. 50-361/80-12)

Areas Inspected: Routine, unannounced inspection of licensee's preoperational test program and procedures and independent inspection effort. The inspection involved 129 inspector-hours onsite by three NRC inspectors.

Results: Of the five areas inspected, one item of noncompliance and no deviations were identified. The item of noncompliance is described in Paragraph 6.

DETAILS

1. Persons Contacted

a. Southern California Edison Company (SCE)

- +K. A. Slagel, Startup Supervisor
- +J. C. Wait, Lead Quality Assurance Engineer
- +W. M. Petro, Assistant Project Manager
- +P. R. Belhumeur, Startup Quality Supervisor
- *G. A. Chaves, Project Startup Supervisor
- *K. E. O'Connor, NSSS Test Operations Supervisor
- +*P. A. Croy, Site Project Quality Assurance Supervisor
- +*D. E. Nunn, Quality Assurance Manager
- *R. M. Rosenblum, Startup Engineering Supervisor
- H. L. Richter, Project Engineer
- *P. R. King, Operations Lead Quality Assurance Engineer
- *C. R. Horton, Startup Quality Assurance Engineer
- *W. M. Schwab, Startup Supervisor

b. Bechtel Corporation

- *R. P. Mills, Startup Construction Quality Assurance Engineer
- *L. W. Hurst, Project Field, Quality Assurance Supervisor
- +K. E. Hess, Startup Project Engineering Supervisor
- +D. W. Strolman, Startup Quality Assurance Supervisor
- +J. E. Geiger, Project Quality Assurance Supervisor
- *W. E. French, Project Startup Quality Assurance Engineer

In addition, construction and maintenance craftsmen, engineers and foremen were contacted during the inspection.

*Denotes attendees at management meeting on August 14, 1980.

+Denotes attendees at Management meeting on August 21, 1980.

2. Plant Status

This licensee reported the Unit 2 construction to be 94% complete as of August 13, 1980.

3. Licensee Action on Previous Inspection Findings

The inspectors examined actions taken by the licensee on previous inspector identified concerns as follows:

- a. (Closed) Follow-up Item (50-361/80-11/01): Preoperation Test 2PE-230-01, Rev. 0, Component Cooling Water System. The procedure omission and the requirements for balancing the system flow were corrected as appropriate.

- b. (Closed) Follow-up Item (50-361/80-11/02): Preoperation Test 2PE-565-01, Rev. 0. Auxiliary Feedwater Pump Emergency and Normal Heating and Ventilation Cooling System.

The omission and errors in the procedure were corrected as appropriate.

- c. (Closed) Follow-up Item (50-361/80-11/03): Preoperation Test 2PE-430-01, 480 V.A.C., Switchgear Energize and Interlock Test (Non-IE). The test methods being used were found to have sufficient overlap in the test procedures to meet the requirements of Regulatory Guide 1.68, Rev. 0.

4. Preoperation Test Procedure Review

The inspectors completed review of the following licensee approved preoperational test procedures:

- 2PE-225-01 - High Pressure Safety Injection System (HPSI)
- 2PE-225-02 - Low Pressure Safety Injection System (LPSI)
- 2PE-225-03 - Safety Injection Tanks System (SIT)
- 2PE-225-04 - Shutdown Cooling System
- 2PE-502-01 - Containment Dome Air Circulators
- 2ST-225-01 - Special Test Procedure - HPSI
- 2AC-504-01 - Containment Hydrogen Purge System
- 2PE-226-02 - Iodine Removal System
- 2PE-226-01 - Containment Spray System

During the first phase of this inspection in July a review of the draft procedures relating to the engineered Safeguards Systems listed above disclosed several items relating to typing errors and failure to adequately address certain items in Chapter 14 of the FSAR. In August, the inspectors verified from a review of the approved procedures that the errors and discrepancies had been corrected.

One item of significance was identified in July 1980. The as-built interlock on the Safety Injection Tank Isolation Valves was found to be inconsistent with the description provided in Section 6.3 of the FSAR. The FSAR provides that "An interlock with pressurizer pressure will prevent the safety injection tank valves from being closed until RCS pressure drops below 376 lb/in²g. The drawings of the as-built system showed that the valves would close automatically when the RCS pressure dropped below 500 lb/in²g. The test procedure provided for a test of the interlock at the 376 lb/in²g.

The licensee investigated the apparent discrepancy and found that the described interlock was incorporated in Amendment 14 to the FSAR. The design change to modify the system to conform to the FSAR description was forwarded by CE to the licensee in September 1979. Subsequently, the Bechtel elementary drawing was scheduled for revision and the design change package (DCP) to add the interlock feature was scheduled for completion in August 1980.

The licensee's representative stated that the system for assuring that newly committed conditions in the FSAR were under evaluation to assure that any changes to the FSAR be implemented in a timely manner. This area will be reviewed in a future inspection. (50-361/80-12/01)

No items of noncompliance or deviations were identified.

5. Plant Procedures

The inspectors selected 12 plant procedures that had been prepared, reviewed and approved pursuant to the licensee's approved Station Document Procedure to verify that the scope of the plant procedures system is adequate to control safety related operations within regulatory requirements and to determine the adequacy of management controls in implementing and maintaining a viable procedure system. The plant procedures selected for review were:

- a. Station Document Procedure - S023-VI
- b. Operations Department Training - S023-VI-3
- c. System Turnover - S023-V-7
- d. Fuel Handling Building Emergency Ventilation and Containment Hydrogen Purge System 18 Month Test - S023-V-5.1
- e. Organization and Responsibility of Unit 2 & 3 On-site Review Committee - S023-VI-8
- f. Auxiliary Feedwater Pump Operation - S023-2-4
- g. Salt Water Cooling System Operation - S023-2-8
- h. Instrument and Test Procedure S023-II-9.161 - Taylor Pneumatic Indicator Model 1401T, Calibration
- i. Instrument and Test Procedure S023-II-9.500 - Excore Neutron Monitor Safety Channel Calibration
- j. Operation and Calibration of Teletector Survey Instrument - S023-VII-2.6
- k. Calculation of Core Average Burnup - S023-V-1.5
- l. Operation of Class IE VDC Systems - S023-6-15
- m. Loss of AC Power - S023-3-5.4

No items of noncompliance or deviations were identified. However, the inspectors pointed out to the licensee representative that their program

calls for revision and update of procedures on a 2-year cycle and that the approval date on several of the above listed procedures was approximately two years ago.

6. Preoperational Testing Quality Assurance

The inspector reviewed the QA/QC activities required for turnover of systems from construction for prerequisite testing and from prerequisite testing to preoperational testing. The personnel qualifications and procedures used appeared to be adequate except as listed below:

- a. Procedures WPP/QCI and TI-17 do not provide criteria for determining when station management must sign the turnover packages. Some of the startup turnover packages and changes to the turnover packages were not signed by the station management. Although this was allowed by the procedure, the inspector could not determine whether the signature of a member of the station management was appropriate or not.

SCE Management personnel stated that procedures WPP/QCI and TI-17 would be reviewed to determine what act on should be taken to clarify which organizations were required to sign the turnover packages.
(50-361/80-12/02)

- b. The turnover package for the Safety Injection System (2BHA) and the change (File No. 0055) to the 4.16 KVA System (2PBA) was not signed by anyone from Startup QA. The space for the Startup QA signature was found to be blank. The records packages had been transmitted to the records storage area (EDMC) without the Startup QA signature. This is contrary to the requirements of WPP/QCI 800, Rev. 2, Paragraph 6.7.1.3, which states in the explanation of how to process the turnover package that, "S/U QA shall sign and date. His signature and date shall signify that the component or System Turnover Package has been reviewed for completeness and accountability prior to transmitting the package to EDMC for retention." A subsequent review by S/U QA of the turnover package for the Safety Injection System found several administrative errors that required correction. This is an item of noncompliance.
(50-361/80-12/03)

With the one exception noted above, no items of noncompliance or deviations were identified.

7. Plant Tour

The inspector toured Unit 2 several times during the report period. Particular attention was directed to observing welding and burning activities, housekeeping, equipment preservation, maintenance activities and work on completed systems.

No items of noncompliance or deviations were identified.

8. Management Interview

On August 14 and August 21, 1980, the inspectors met with licensee representatives identified in Paragraph 1 to discuss the scope and findings of the inspection. The licensee made commitments as described in Paragraphs 4 and 6.a. The inspectors identified one item of noncompliance with regulatory requirements in Paragraph 6.b.