



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-4005

July 20, 2005

Harold B. Ray, Executive Vice President
San Onofre, Units 2 and 3
Southern California Edison Co.
P.O. Box 128, Mail Stop D-3-F
San Clemente, CA 92674-0128

SUBJECT: ERRATA FOR SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2
AND 3, NRC INTEGRATED INSPECTION REPORT 05000361/2005003;
05000362/2005003

Dear Mr. Ray:

Please replace the first page of the Summary of Findings and pages 9 through 12 of NRC Inspection Report 05000361/2005003; 05000362/2005003 dated July 15, 2005, with the enclosed revised pages. The purpose of this change is to correct typographical errors.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

/RA/ by CFO'Keefe acting for

Troy W. Pruett, Chief
Project Branch D
Division of Reactor Projects

Enclosure:
As stated

Dockets: 50-361
50-362
Licenses: NPF-10
NPF-15

Southern California Edison Co.

- 2 -

cc w/enclosure:

Chairman, Board of Supervisors
County of San Diego
1600 Pacific Highway, Room 335
San Diego, CA 92101

Gary L. Nolf
Power Projects/Contracts Manager
Riverside Public Utilities
2911 Adams Street
Riverside, CA 92504

Eileen M. Teichert, Esq.
Supervising Deputy City Attorney
City of Riverside
3900 Main Street
Riverside, CA 92522

Raymond Waldo, Vice President,
Nuclear Generation
Southern California Edison Company
San Onofre Nuclear Generating Station
P.O. Box 128
San Clemente, CA 92674-0128

David Spath, Chief
Division of Drinking Water and
Environmental Management
California Department of Health Services
P.O. Box 942732
Sacramento, CA 94234-7320

Michael R. Olson
San Onofre Liaison
San Diego Gas & Electric Company
P.O. Box 1831
San Diego, CA 92112-4150

Ed Bailey, Chief
Radiologic Health Branch
State Department of Health Services
P.O. Box 997414 (MS 7610)
Sacramento, CA 95899-7414

Mayor
City of San Clemente
100 Avenida Presidio
San Clemente, CA 92672

James D. Boyd, Commissioner
California Energy Commission
1516 Ninth Street (MS 34)
Sacramento, CA 95814

Douglas K. Porter, Esq.
Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, CA 91770

Dwight E. Nunn, Vice President
Southern California Edison Company
San Onofre Nuclear Generating Station
P.O. Box 128
San Clemente, CA 92674-0128

Daniel P. Breig, Station Manager
Southern California Edison Company
San Onofre Nuclear Generating Station
P.O. Box 128
San Clemente, CA 92674-0128

A. Edward Scherer
Southern California Edison
San Onofre Nuclear Generating Station
P.O. Box 128
San Clemente, CA 92674-0128

Brian Katz, Vice President, Nuclear
Oversight and Regulatory Affairs
Southern California Edison Company
San Onofre Nuclear Generating Station
P.O. Box 128
San Clemente, CA 92674-0128

Adolfo Bailon
Field Representative
United States Senator Barbara Boxer
312 N. Spring Street, Suite 1748
Los Angeles, CA 90012

Southern California Edison Co.

- 4 -

Chief, Technological Services Branch
FEMA Region IX
Department of Homeland Security
1111 Broadway, Suite 1200
Oakland, CA 94607-4052

Electronic distribution by RIV:
 Regional Administrator (**BSM1**)
 DRP Director (**ATH**)
 DRS Director (**DDC**)
 DRS Deputy Director (**KMK**)
 Senior Resident Inspector (**CCO1**)
 Branch Chief, DRP/D (**TWP**)
 Senior Project Engineer, DRP/D (**NFO**)
 Team Leader, DRP/TSS (**RLN1**)
 RITS Coordinator (**KEG**)
 DRS STA (**DAP**)
 J. Dixon-Herrity, OEDO RIV Coordinator (**JLD**)
RidsNrrDipmlipb
 W. A. Maier, RSLO (**WAM**)

SISP Review Completed: cfo ADAMS: : Yes No Initials: cfo_
 : Publicly Available Non-Publicly Available Sensitive : Non-Sensitive

R:_SO23\2005\SO2005-03RP Errata.wpd

RIV:SPE:DRP/D	C:DRP/D			
NFO'Keefe;df	TWPruett			
/RA/	CFO'Keefe for			
7/20/05	7/20/05			

OFFICIAL RECORD COPY

T=Telephone

E=E-mail

F=Fax

SUMMARY OF FINDINGS

IR 05000361/2005003, 05000362/2005003; 04/08/05 - 06/26/05; San Onofre Nuclear Generating Station, Units 2 & 3; Integrated Resident and Regional Report; Maintenance Effectiveness and Temporary Plant Modifications

This report covered a 3-month period of inspection by three resident inspectors, two regional office inspectors, and one headquarters inspector. The inspection identified one noncited violation and one finding. The significance of most findings is indicated by their color (Green, White, Yellow, or Red) using Inspection Manual Chapter 0609, "Significance Determination Process." Findings for which the significance determination process does not apply may be Green or be assigned a severity level after NRC management's review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

A. NRC-Identified and Self-Revealing Findings

Cornerstone: Initiating Events

- Green. The inspectors identified a finding for the failure to develop an adequate plan to identify hydraulic leakage on Main Feedwater Block Valve 3HV4051. This issue involved human performance crosscutting aspects associated with operators failing to identify the leak on normal shift rounds. This issue was entered into the licensee's corrective action program as Action Requests 050401214 and 050401222.

The finding was determined to be greater than minor because it was associated with the human performance attribute of the initiating events cornerstone and affected the cornerstone objective of limiting the likelihood of those events that upset plant stability. Furthermore, if left uncorrected, the finding would have become a more significant safety concern in that continued hydraulic fluid leakage from Valve 3HV4051 could result in a plant transient. Using Manual Chapter 0609, "Significance Determination Process," Phase 1 Worksheet, the finding was determined to have very low safety significance because the hydraulic fluid leakage had not increased to the point where it would contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available (Section 1R23).

Cornerstone: Mitigating Systems

- Green. The inspectors identified a noncited violation of 10 CFR 50.65 (a)(1) for the failure to include component deficiencies of a system important to safety in the maintenance rule program. Specifically, the licensee did not incorporate piping header failures of the Unit 2 and Unit 3 steam bypass control system into the maintenance rule program to ensure appropriate monitoring and goal setting activities were established. This issue was entered into the corrective action program as AR 050200923.

ENCLOSURE

1R20 Refueling and Outage Activities (71111.20)

a. Inspection Scope

For the listed outage, the inspectors reviewed the following risk significant outage activities to verify defense in depth commensurate with the outage risk control plan and compliance with the Technical Specifications: (1) the risk control plan; (2) tagging/clearance activities; (3) reactor coolant system instrumentation; (4) electrical power; (5) decay heat removal; (6) reactivity control; (7) containment closure; (8) heatup and cooldown activities; and (9) licensee identification and implementation of appropriate corrective actions associated with outage activities.

- May 4, 2005, Unit 3 planned outage to repair cracks in the steam bypass header piping and to repair an external hydraulic leak from main feedwater block Valve 3HV4051

The inspectors completed one sample.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors reviewed the Updated Final Safety Analysis Report, procedure requirements, and Technical Specifications to ensure that the six below listed surveillance activities demonstrated that the SSC's tested were capable of performing their intended safety functions. The inspectors either witnessed or reviewed test data to verify that the following significant surveillance test attributes were adequate: (1) preconditioning; (2) evaluation of testing impact on the plant; (3) acceptance criteria; (4) test equipment; (5) procedures; (6) jumper/lifted lead controls; (7) test data; (8) testing frequency and method demonstrated Technical Specification operability; (9) test equipment removal; (10) restoration of plant systems; (11) fulfillment of ASME Code requirements; (12) updating of performance indicator data; (13) engineering evaluations, root causes, and bases for returning tested SSC's not meeting the test acceptance criteria were correct; (14) reference setting data; and (15) annunciators and alarms setpoints. The inspectors also verified that the licensee identified and implemented any needed corrective actions associated with the surveillance testing.

- April 12, 2005, Unit 2 safety injection Tank 2T-009 surveillance per Procedure SO123-III-1.1.23, "Units 2 and 3 Chemical Control of Primary Plant and Related Systems," Revision 43

- May 5-6, 2005, Unit 3 pressurizer spray Valves 3PV100A and 3PV100B performance tests per Procedure SO23-I-6.300, "Air Operated Valve Diagnostic Testing," Revision 7
- May 13, 2005, Unit 3 CCW Pump 3P026 inservice test per Procedure SO23-3-3.60.3, "Component Cooling Water and Seismic Makeup Pump Test," Revision 5
- May 26, 2005, Unit 2 AFW Pump 2P140 inservice test per Procedure SO23-3-3.60.6, "Auxiliary Feedwater Pump and Valve Testing," Revision 10
- June 1, 2005, Unit 3 AFW Pump 3P504 inservice test per Procedure SO23-3-3.60.6, "Auxiliary Feedwater Pump and Valve Testing," Revision 10
- June 16, 2005, Units 2 and 3 sound powered phone system check per Procedure SO23-6-31, "Communication System Operation," Revision 4

The inspectors completed six samples.

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

The inspectors reviewed the Updated Final Safety Analysis Report, plant drawings, procedure requirements, and Technical Specifications to ensure that the one listed temporary modification was properly implemented. The inspectors: (1) verified that the modification did not have an effect on system operability and availability; (2) verified that the installation was consistent with the modification documents; (3) ensured that the postinstallation test results were satisfactory and that the impact of the temporary modification on permanently installed SSC's was supported by the test; (4) verified that the modification was identified on control room drawings and that appropriate identification tags were placed on the affected drawings; and (5) verified that appropriate safety evaluations were completed. The inspectors verified that the licensee identified and implemented any needed corrective actions associated with the temporary modification.

- C April 20, 2005, Unit 3 main feedwater block Valve 3HV4051 to Steam Generator E089 Fermanite repair

The inspectors completed one sample.

b. Findings

Introduction. The inspectors identified a Green finding for the failure to develop an adequate monitoring plan to identify a hydraulic fluid leak on main feedwater block Valve 3HV4051.

Description. On January 20, 2005, the licensee identified that Unit 3 main feedwater block Valve 3HV4051 had an approximate one drop per second hydraulic fluid leak. On January 27 the licensee successfully stopped the leak by installing a Furmanite rig around a leaking fitting on the hydraulic supply piping to the valve.

On April 20 the inspectors walked down portions of the Unit 3 main feedwater system in order to evaluate the condition of the Furmanite rig that had been installed on Valve 3HV4051. The inspectors observed that the Furmanite rig was leaking hydraulic fluid at the rate of approximately 10 drops per minute. Furthermore, the inspectors observed that the leak collection system revealed enough hydraulic fluid to demonstrate that the leak had been active for more than one operations shift. Specifically, the catch basin was full of hydraulic fluid and the tygon tubing that was leading into the 55-gallon drum had an approximate 8-inch section that was full of hydraulic fluid. The inspectors informed the Unit 3 control room supervisor of the degraded condition of Valve 3HV4051 and the licensee reinjected additional Furmanite the following day to stop the leak.

Valve 3HV4051 serves as a backup to main feedwater isolation Valve 3HV4052, but it is not credited in the Updated Final Safety Analysis Report as a containment isolation valve. The hydraulic system of Valve 3HV4051 serves to keep the valve open against high pressure nitrogen, and its subsequent loss would result in the valve closing. The closing of the valve would likely result in the loss of main feedwater and a reactor trip.

The inspectors interviewed operations personnel that were on shift the 3 days prior to the Furmanite rig leaking on April 20, 2005. The interviews consisted of three field operators that performed rounds on Valve 3HV4051 and their shift manager. The inspectors determined that all three operators and the shift manager had a different understanding of the status of the valve and were either provided incomplete or no instructions on how to monitor the status of the Furmanite rig on the valve. The inspectors determined that a monitoring plan had not been established despite the licensee's assessment that the Furmanite rig was susceptible to leakage. The licensee indicated that operators were expected to monitor the condition of the valve as part of their normal shift rounds, which included checking equipment for fluid leakage as described in Procedure OSM-5, "Operator Rounds." The licensee subsequently developed a monitoring plan to ensure that Valve 3HV4051 would be inspected twice per shift. The value of the monitoring plan was demonstrated when a three to four drop per minute leak through the Fermanite rig was identified by the licensee on May 2. The licensee elected not to reinject the valve, but instead permanently repaired it during a planned shutdown on May 4.

ENCLOSURE

Analysis. The performance deficiency associated with this finding was the failure to develop an adequate monitoring plan to identify a hydraulic fluid leak from Valve 3HV4051. This finding was associated with the initiating events cornerstone. The finding was determined to be greater than minor because it was associated with the human performance attribute of the initiating events cornerstone and affects the cornerstone objective of limiting the likelihood of those events that upset plant stability. Furthermore, if left uncorrected, the finding would have become a more significant safety concern in that continued hydraulic fluid leakage on Valve 3HV4051 could result in a plant transient. Using Manual Chapter 0609, "Significance Determination Process," Phase 1 Worksheet, the finding was determined to have very low safety significance because the hydraulic fluid leak had not increased to the point where it contributed to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions were not available. This issue involved human performance crosscutting aspects associated with the failure to identify the hydraulic leak during operator rounds.

Enforcement. No violation of regulatory requirements occurred. The inspectors determined that the finding did not represent a noncompliance because Valve 3HV4051 is not subject to the requirements of 10 CFR Part 50, Appendix B. While Valve 3HV4051 serves as a backup to a containment isolation valve, it is not credited in the Updated Final Safety Analysis Report as a containment isolation valve. This finding had been entered into the licensee's corrective action program as ARs 050401214 and 050401222. This finding is identified as FIN 05000362/2005003-02, "Failure to Identify Hydraulic Leak on Main Feedwater Block Valve 3HV4051."

Cornerstone: Emergency Preparedness

1EP1 Exercise Evaluation (71114.01)

a. Inspection Scope

The inspectors reviewed the objectives and scenario for the 2005 Biennial Emergency Preparedness Exercise to determine if the exercise would acceptably test major elements of the emergency plan. The scenario included a loss of electrical power to all of the main control room alarms, a seized reactor coolant pump, a main steam line break into the primary containment, and a helicopter crash into the main switchyard which resulted in a loss of offsite power. The scenario continued with a station blackout due to failures of the emergency diesel generators, and a steam generator tube rupture and fuel cladding failure, resulting in an ongoing radioactive steam release to the environment. The licensee activated all of their emergency facilities to demonstrate their capability to implement the emergency plan.

The inspectors evaluated exercise performance by focusing on the risk-significant activities of classification, notification, protective action recommendations, and assessment of offsite dose consequences in the simulator control room and the following emergency response facilities:

ENCLOSURE