



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

January 12, 1990

Docket Nos. 50-361  
and 50-362

Mr. Harold B. Ray, Vice President  
Nuclear Engineering, Safety, and Licensing Department  
Southern California Edison Company  
23 Parker Street  
Irvine, California 92718

Dear Mr. Ray:

SUBJECT: NRC INSPECTION OF SAN ONOFRE NUCLEAR GENERATING STATION  
UNITS 2 AND 3, REPORT NO. 50-361 AND 362/89-200

This refers to the Safety Systems Functional Inspection (SSFI) conducted by the NRC Office of Nuclear Reactor Regulation during October 30 through November 8 and November 27 through November 30, 1989. The inspection team consisted of headquarters and regional personnel as well as three consultants.

The purpose of the inspection was to determine whether the electrical distribution system as designed, installed, and configured at San Onofre Units 2 and 3 would be capable of performing its intended safety functions. During the inspection, the team conducted technical reviews of the calculations and supporting documents for this system at your Nuclear Engineering offices in Irvine, California. In addition, it conducted system walkdowns and reviews of activities associated with this system at the San Onofre site.

As a result of this inspection, the team identified four general areas of weakness which were discussed during the exit meeting on November 30, 1989. The first area of weakness concerned setpoints that had been improperly delineated and were not consistent with the design basis for the respective systems. The second area of weakness concerned inadequate calibration and surveillance procedures. Three of the team's findings were related to procedures and documents that were inadequate in ensuring that the selected setpoints are properly translated into appropriate equipment settings.

The third area of weakness identified by the inspection team was in the area of maintenance. Two of the team's findings, the improper evaluation of diesel piston measurements, and the numerous hardware deficiencies identified during the team's walkdown inspections of Units 2 and 3, were the apparent result of inattention to detail and are not indicative of a strong maintenance program. These findings were further substantiated by your walkdown, performed after the first half of our inspection, during which numerous documentation and data entry errors were identified.

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The fourth area of weakness concerned the lack of adequate, auditable calculations as necessary to ensure that the design basis for the current electrical distribution and associated systems had been met. We believe the lack of formal calculations has added to the uncertainty regarding the implementation of the design-basis of certain systems.

The team also identified several design strengths during the inspection. We found your immediate actions taken as a result of our findings to be both thorough and prompt. In addition, your current design-basis reconstitution effort was seen as a way of resolving some of the deficiencies identified by the inspection team.

In accordance with 10 CFR 2.790(a), a copy of this letter and the enclosure will be placed in the NRC Public Document Room. Any specific enforcement actions resulting from this inspection will be identified by the Region V staff in separate correspondence.

You are requested to respond to this office within 60 days to inform us of the action taken related to the deficiencies identified in the enclosed inspection report and the date that these actions will be completed for follow-up inspection. Should you have any questions concerning this inspection, please contact the NRR Project Manager, Lawrence Kokajko, or the inspection team leader, Jeffrey Jacobson. Messrs. Kokajko and Jacobson can be reached at (301) 492-1380 and (301) 492-0996, respectively.

Sincerely,

Gary M. Holahan, Acting Director  
Division of Reactor Projects III/IV/V  
and Special Projects  
Office of Nuclear Reactor Regulation

Enclosure:  
NRC Inspection Report  
50-361 and 362/89-200

cc w/enclosure: See page 3

Distribution: See page 4

\*See previous concurrence

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Mr. Harold B. Ray

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January 12, 1990

cc w/enclosure:

Charles R. Kocher, Esq.  
James A. Beoletto, Esq.  
Southern California Edison Company  
Irvine Operations Center  
23 Parker Street  
Irvine, California 92718

Orrick, Herrington & Sutcliffe  
ATTN: David R. Pigott, Esq.  
600 Montgomery Street  
San Francisco, California 94111

Alan R. Watts, Esq.  
Rourke & Woodruff  
701 S. Parker St. No. 7000  
Orange, California 92668-4702

Mr. Sherwin Harris  
Resource Project Manager  
Public Utilities Department  
City of Riverside  
3900 Main Street  
Riverside, California 92522

Mr. Charles B. Brinkman  
Combustion Engineering, Inc.  
12300 Twinbrook Parkway, Suite 330  
Rockville, Maryland 20852

Mr. Phil Johnson  
U.S. Nuclear Regulatory Commission  
Region V  
1450 Maria Lane, Suite 210  
Walnut Creek, California 94596

Mr. Don Womeldorf  
Chief Environmental Management Branch  
California Department of Health  
714 P Street, Room 616  
Sacramento, California 95814

Mr. F. B. Marsh, Project Manager  
Bechtel Power Corporation  
P.O. Box 60860  
Terminal Annex  
Los Angeles, California 90060

Mr. Robert G. Lacy  
Manager, Nuclear Department  
San Diego Gas & Electric Company  
P. O. Box 1831  
San Diego, California 92112

Mr. John Hickman  
Senior Health Physicist  
Environmental Radioactive Mgmt. Unit  
Environmental Management Branch  
State Department of Health Services  
714 P Street, Room 616  
Sacramento, California 95814

Resident Inspector, San Onofre NPS  
c/o U.S. Nuclear Regulatory Commission  
Post Office Box 4329  
San Clemente, California 92672

Mayor, City of San Clemente  
San Clemente, California 92672

Regional Administrator, Region V  
U.S. Nuclear Regulatory Commission  
1450 Maria Lane/Suite 210  
Walnut Creek, California 94596

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



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