Southern California Edison Company

1982 MAY 20 AM 11: 05

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REGION V

L. T. PAPAY
VICE PRESIDENT

TELEPHONE
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May 18, 1982

U.S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
Region V
1450 Maria Lane, Suite 210
Walnut Creek, California 94596-5368

Attention: Mr. R. H. Engelken, Regional Administrator

Dear Sir:

Subject: Docket No. 50-361/50-362
IE Inspection Report 50-361/82-15 and 50-362/82-05
San Onofre Nuclear Generating Station, Units 2 and 3

Your letter of April 23, 1982 jointly issued IE Inspection Report Nos. 50-361/82-15 and 50-362/82-05 and forwarded a Notice of Violation resulting from the February 13, 1982 to April 9, 1982 routine inspections of San Onofre Unit 2 by A. E. Chaffee, R. Pate, J. Carlson, M. Mendonca, and G. Johnston.

Enclosure (I) of this letter provides our response to the three-part Notice of Violation contained in Appendix A of the subject report.

I trust the enclosure responds adequately to all aspects of the Violation. If you have any questions or if we can provide additional information, please let me know.

Subscribed on this 18 day of May, 1982

By _____
L. T. Papay
Vice President
Southern California Edison Company

Subscribed and sworn to before me this 18th day of May, 1982.

_____
Notary Public in and for the
County of Los Angeles, State of
California

OFFICIAL SEAL
AGNES CRABTREE
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
LOS ANGELES COUNTY
My Commission Exp. Aug. 27, 1982

Enclosure I

cc: A. E. Chaffee (NRC Site Inspector - San Onofre Unit 2)

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ENCLOSURE I

Response to the Items of Non-Compliance identified in Appendix A to IE Inspection Reports 50-361/82-15 and 50-362/82-05.

ITEM A

"Technical Specification 6.8.1 states: 'Written procedures shall be established, implemented and maintained covering...

a. The applicable procedures recommended in Appendix 'A' of Regulatory Guide 1.33, Revision 2, February 1978.'

Appendix 'A' of Regulatory Guide 1.33, Revision 2, February 1978, recommends, in part, the following procedures: 'Instructions for energizing, filling, venting, draining, startup, shutdown, and changing modes of operation should be prepared, as appropriate, for the following systems:

b. Control Rod Drive System (including part-length rods)'

In accordance with the above requirement, Maintenance Procedure SO23-I-3.13, 'Control Element Assembly Extension Shaft Coupling,' was approved for use on February 11, 1982. Step 6.9 of this procedure requires the following:

'Verify engagement by turning the hand wheel CW until the maximum scale reading, located on the lifting screw assembly is attained and record on the Maintenance Data Record Form, Exhibit B. This numerical scale reading should be approximately 12 higher (24 linear graduations) than that recorded in paragraph 6.5. This difference represents the extension shaft weight.'

Contrary to the above, on March 4, 1982, at approximately 11:00 am the inspector observed at least one occasion when an operating crew omitted Step 6.9 of Procedure SO23-I-3.13 while latching CEA extension shafts. This is a severity level IV violation. (Supplement I).

In responding to this item, the licensee is requested to address also the potentially causative factors of inadequate supervision, inadequate reference to procedures (relative to training received), and failure to strictly follow instructions relating to recording of data."

1. CORRECTIVE STEPS WHICH HAVE BEEN TAKEN AND RESULTS ACHIEVED

Once the discrepancy in following Maintenance Procedure SO23-I-3.13, "Control Element Assembly Extension Shaft Coupling", was identified, the Senior Reactor Operator (SRO) in charge of the evolution immediately stopped all work until the requirements of SO23-I-3.13 were completely understood by the personnel performing the coupling operation. Those extension shafts previously coupled by the crew in question were then verified and the determination made that data already obtained was valid.

In training sessions conducted prior to fuel load, procedural compliance was emphasized. On February 4, 1982 a period of instruction which included "hands-on" operation of the equipment to be used in latching the Control Element Assembly (CEA) extension shafts and a review of SO23-I-3.13 had been provided. On the morning of March 4, 1982 another training session with both of the teams which were later to perform the latching operation was conducted.

Apparently, one of the two crews performing the operation omitted the identified procedural step, while a second crew that received the same training was performing the procedure correctly at the time of the incident. Maintenance Procedure SO23-I-3.13, although judged to be adequate, was made complex by the number of detailed operations involved in the coupling process. It had been stressed in training that if a particular step could not be performed in accordance with the procedure, work was to stop until the problem was resolved. The contractor crew in question failed to do this.

As a result of this incident, on March 5, 1982, an additional briefing and tool demonstration was conducted for the personnel responsible for performing the coupling operation to ensure thorough understanding of the requirements of SO23-I-3.13.

Intensive management attention to this problem included a memorandum to Station Management and Watch Engineers dated April 8, 1982 in which the Station Manager stated that literal verbatim compliance was to be considered the highest priority in plant operations. His instructions included the requirement that work stop immediately whenever a deficiency is found in a procedure. Literal verbatim compliance includes the concept of recording required data at the time the appropriate procedure step is completed.

2. CORRECTIVE STEPS WHICH WILL BE TAKEN TO AVOID FURTHER ITEMS OF NON-COMPLIANCE

At the time of the incident, the supervision provided by the SRO was momentarily inadequate in that his attention was focused on one team rather than maintaining coordinated control over both teams. To preclude recurrence, a synopsis of this event will be prepared and read by all operating personnel emphasizing the need for positive control of subordinates at all times, but particularly during complex evolutions. This will be accomplished by June 1, 1982. The generic responsibilities of the SRO in supervising plant operations will continue to be stressed in ongoing requalification training. Verbatim procedural compliance will remain a Station policy.

3. DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

Full compliance was achieved on March 4, 1982 when the SRO stopped work until Maintenance Procedure SO23-I-3.13, "Control Element Assembly Extension Shaft Coupling", was thoroughly understood by personnel performing the coupling operation and the extension shafts previously coupled by the crew in question were verified.

ITEM B

"10 CFR 50 Appendix B, Criterion V states: 'Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings.'

Contrary to the above, the licensee's Piping and Instrumentation Drawings (P&IDs) did not show bypass valves which were installed in parallel with valve numbers 16"-022-C and 16" -022-C and certain other large size valves; nor were the bypass valves referenced in the applicable procedures.

As a result, water of various boron concentrations entered the reactor coolant system via the open bypass valve around valve number 16"-022-C from about February 16, 1982 until about March 24, 1982, and identification of the source of the water was impaired because the bypass valves were not shown on the P&IDs available in the Control Room, nor referenced in the applicable procedures.

This is a severity level IV violation (Supplement I)."

RESPONSE

1. CORRECTIVE STEPS WHICH HAVE BEEN TAKEN AND RESULTS ACHIEVED

On April 26, 1982, Piping and Instrumentation Drawing (P&ID) 40112, "Safety Injection System", on which valves 16"-022-C and 16"-023-C are shown, was revised to include the missing bypass valves. Additionally, all Unit 2 and 3 P&ID's were compared to appropriate isometric drawings to determine whether or not other existing bypass valves had been omitted. As a result, one hundred sixty-eight bypass valves were added to eight P&ID's and the revised drawings reissued on April 28, 1982. These are all the P&ID's in need of correction.

2. CORRECTIVE STEPS WHICH WILL BE TAKEN TO AVOID FURTHER ITEMS OF NON-COMPLIANCE

Engineering Procedures SO123-V-4.15, "Structure and Equipment System Turnover", and SO123-V-4.14, "Proposed Facility Change", provide instructions to ensure that plant modifications and related work are properly reflected in the P&ID's. To further emphasize the provisions of these procedures, training for Station Engineers on Proposed Facility Changes and Work Package Turnover has been scheduled from May 4-20, 1982 to assure that future changes to plant configuration are properly depicted on the P&ID's prior to acceptance.

Operating Instruction SO23-3-2.6, "Shutdown Cooling System Operation", which is relevant to the boron dilution problem, is currently being revised to address the bypass valves for valves 16"-022-C and 16"-023-C. The revised instruction will be issued by June 1, 1982.

Operating Instruction SO23-O-17, "Locking of Critical Valves", is being revised to incorporate the missing bypass valves and will be issued by June 15, 1982.

In addition, the Operations Procedures Group for Units 2 and 3 has been provided with a Master Valve List. The Group has been directed, whenever a procedure is scheduled for revision, to review it against the Master Valve List to ensure bypass valves are appropriately referenced. Also, the P&ID system will be evaluated to verify that there are no other generic classes of valves that should be shown on these documents that are not now present.

3. DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

Full compliance will be achieved on June 15, 1982 with the issuance of Operating Instruction SO23-O-17, "Locking of Critical Valves".

ITEM C

"Operating License NPF-10 section 2.C(19)b states, in part:

'1. SCE shall develop and implement administrative procedures to limit the working hours of individuals of the nuclear power plant operating staff who are responsible for manipulating plant controls or for adjusting on-line systems and equipment affecting plant safety which would have an immediate impact on public health and safety.

Adequate shift coverage shall be maintained without routine heavy use of overtime. However, in the event that unforeseen problems require substantial amounts of overtime to be used, the following guidelines shall be followed:

'2. An individual shall not be permitted to work more than 24 hours in any 48-hour period, not more than 72 hours in any seven-day period (all excluding shift turnover time).

'Any deviation from the above guidelines shall be authorized by the station manager, his deputy, the operations manager, or higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation. Controls shall be included in the procedures such that individual overtime will be reviewed monthly by the station manager or his designee to assure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.'

Contrary to the above, from approximately February 24 through March 22, 1982, Unit 2 operating personnel were working more than 72 hours in a seven day period without appropriate management authorization.

This is a severity level IV violation (Supplement I)."

RESPONSE

1. CORRECTIVE STEPS WHICH HAVE BEEN TAKEN AND RESULTS ACHIEVED

On February 10, 1982, the Station Manager approved twelve-hour shifts for all Unit 2 and 3 operating personnel in order to meet temporary increased personnel demands resulting from Unit 2 pre-fuel load activities, Unit 3 start-up support and operator licensing and requalification requirements. The intent of the memorandum was to authorize affected individuals to work approximately twenty hours per week overtime when averaged over the four week shift schedule. At the time the memorandum was issued, it was not realized that the memorandum did, in fact, represent approval of a work schedule which contradicted the license requirements. As a result, a significant number of operating personnel worked in excess of seventy-two hours in a seven-day period.

Upon becoming aware of the situation, the Station Manager approved a specific request for deviation from the overtime policy, as required by the operating license, to permit operating personnel to exceed the seventy-two hours in a seven-day period criteria. This authorization was in force from March 24-29, 1982 and was subsequently extended through April 7, 1982. A new work schedule has now been implemented which precludes the necessity for working operators in excess of seventy-two hours in any seven-day period.

2. CORRECTIVE STEPS WHICH WILL BE TAKEN TO AVOID FURTHER ITEMS OF NON-COMPLIANCE

The requirement for the Station Manager to review individual overtime was being met by the submission of a report to the On Site Review Committee, of which the Station Manager is Chairman. As a result of this incident, a detailed written report will be provided directly to the Station Manager beginning June 1, 1982. Additionally, the requirement for this monthly audit will be procedurally defined in Station Order SO23-0-4, "Station Operations", by July 1, 1982.

Station management is acutely aware of the effects of overtime on operating personnel, and as the number of trained, licensed operators is increased, work schedules will be implemented to further reduce overtime requirements.

3. DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

Full compliance with the provisions of Operating License NPF-10 was achieved on March 24, 1982 with the issuance by the Station Manager of the explicit authorization to deviate from the license-specified overtime policy.