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Southern California Edison Company

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HAROLD B. RAY
SENIOR VICE PRESIDENT

TELEPHONE
714-458-4400

February 16, 1993

Mr. J. B. Martin
U. S. Nuclear Regulatory Commission, Region V
1450 Maria Lane, Suite 210
Walnut Creek, CA 94596-5368

Dear Mr. Martin:

Subject: Docket Nos. 50-206, 50-361, 50-362
Systematic Assessment of Licensee Performance
San Onofre Nuclear Generating Station, Units 1, 2 & 3

Your letter dated December 24, 1992, forwarded the latest NRC Systematic Assessment of Licensee Performance (SALP) report for San Onofre Nuclear Generating Station and indicated that any comments should be provided within 30 days of our January 14, 1993 meeting. As discussed at the meeting held at San Onofre to review the report, we hereby respectfully submit comments in three areas for your consideration.

As usual, we found the comments and conclusions of the SALP Board to be generally accurate and helpful to us in our continuing efforts to improve our performance. We especially appreciated your encouragement of candor in our discussion on January 14, and it is in that spirit that these comments are provided.

COMMERCIAL GRADE DEDICATION

The SALP report discussion of this topic was limited to comments based on the initial report of the NRC inspection conducted in December 1991. As was discussed in a meeting with NRC staff in Rockville on June 2, 1992, and contrary to the inspection report, we concluded that our program was sound, in compliance with Generic Letter 89-02 and in the process of being upgraded to be in full compliance with Generic Letter 91-05.

This conclusion has recently been supported by a letter to us from Mr. J. W. Roe in which the NRC states that, "...at the time of our December 1991 inspection, [SCE] had made significant progress towards implementing a program addressing the guidance in the NRC generic letters." This letter also concludes that SCE's "...current [Commercial Grade Item] procurement and dedication program is in substantial agreement with the guidance

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contained in NRC Generic Letters 89-02 and 91-05 and that no significant differences exist between [SCE] and NRC interpretation of this guidance as a means of compliance with the requirements of 10 CFR 50, Appendix B."

In summary, we believe that limiting the discussion of Commercial Grade Dedication in the SALP report to comments based on the initial report of the December 1991 inspection does not adequately take into account the extensive subsequent discussion between SCE and the NRC and may convey an inaccurate conclusion concerning our program during the SALP period.

CONSIDERATION OF PLANT RISK

As indicated in the SALP report and discussed in our January 14 meeting, the NRC was concerned that problem investigation and repair of High Pressure Safety Injection (HPSI) pump 3P019 was not planned and executed in a manner that adequately considered the impact of the duration of this work on plant risk. To the contrary, prior to work starting, maintenance management did review the impact on plant risk of this pump being out of service, as defined in a PRA performed earlier for work on a Unit 2 HPSI pump. Subsequently, the Station Manager and Site Vice President also assessed the schedule for performing the 3P019 work, including direct consultation with the safety group, to ensure a full understanding of the risk involved.

In the case of 3P019, efforts had been underway for some time prior to commencement of the repair to identify the cause of intermittent overcurrent tripping of the motor. After eliminating electrical problems as a cause, investigation and repair of the complex pump itself was undertaken. SCE management concluded that this work should proceed deliberately, so as to ensure that the cause could be accurately identified and permanently corrected.

SCE seeks to minimize the unavailability of any plant equipment which contributes to the reliability or safety of plant operation. Proper performance of the HPSI pumps is of particular importance to plant safety, and for that reason a third pump is provided which is not subject to an action statement in the Technical Specifications. It was precisely in order to be able to deliberately and carefully work on a HPSI pump, when necessary, without an unacceptable impact on plant risk and the attendant limiting action statement in the Technical Specifications, that the extra complication and expense of installing a third pump was undertaken.

Therefore, we are concerned that our decision to proceed as we did in this case was subject to criticism in the SALP report. Although unavailability of the pump does impact plant risk, the

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impact was recognized and considered not unacceptable, and it was our judgement that the optimum results would be achieved by use of only the best qualified personnel initially in accordance with a deliberate inspection and repair plan. (See enclosure for the chronology of this effort.)

We recognize that it is not sufficient for us to only adhere to the Technical Specifications to ensure that optimal plant safety is maintained. However, we also are not certain what corrective action to undertake in response to the criticism in the SALP report, or of how it should be related to underlying NRC requirements.

EVALUATION OF SAFETY ASSESSMENT/QUALITY VERIFICATION

We realize that the NRC evaluation in any given area is ultimately based on the judgement of the SALP Board. However, our understanding of the NRC evaluation process, as described in Chapter 0516 of the NRC Manual, is that, for each of the SALP functional areas, management attention to and involvement in the evaluated area is considered within the area itself.

Based on our review of the SALP report, and as discussed in the January 14 meeting, we understand that management aspects of events reviewed in the Engineering/Technical Support area were reflected instead, or in addition, in the Safety Assessment/Quality Verification area. Although the SALP Board was clear in its positive evaluation of our oversight program specifically, and our commitment to the development of a Current Licensing Basis was noted, inclusion of the management aspects of these particular events led to a less positive overall evaluation of the Safety Assessment/Quality Verification area.

Our purpose in providing this comment is only to ensure that the conclusion of your assessment of our performance was developed as you intended. We are not questioning the judgement of the SALP Board in arriving at its conclusion.

CONCLUSION

SCE does not normally provide comments in response to a SALP report. As indicated above, however, we appreciate your encouragement of substantive discussion, and we believe it will

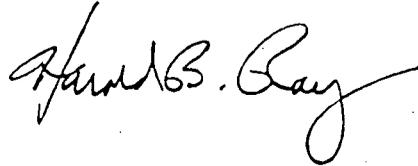
Mr. J. B. Martin

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improve understanding and ultimately contribute to our better performance. If you have any questions concerning the comments above, or if you would like additional information, please let me know.

Sincerely,



Enclosure

cc: M. B. Fields, NRC Project Manager, San Onofre Units 2 & 3
C. W. Caldwell, NRC Senior Resident Inspector, San Onofre
Units 1, 2&3
R. F. Dudley, Section Chief, Non-Power, Decommissioning &
Environmental Project, Directorate of Reactor Project-
3, 4 & 5

ENCLOSURE

UNIT 3 HPSI PUMP 3P019 REPAIR CHRONOLOGY

Following is a chronology of activities associated with evaluation and repair of SONGS 3 High Pressure Safety Injection (HPSI) pump 3P019. As can be seen, 3P019 experienced an overcurrent trip on May 6, 1992 and was removed from service. The pump trip was evaluated, the pump was retested satisfactorily, and the trip was deemed spurious. The pump was returned to service and no other problems were experienced until a second overcurrent trip occurred on August 13, 1992.

Initial efforts by SCE to correct the Unit 3 3P019 overcurrent problems focused on electrical problems. In late August 1992, having examined and largely ruled out electrical problems, it was determined that the problems encountered with the pump were most likely of a mechanical nature.

Due to the limited number of personnel qualified to work on the pump and the desirability of preserving any evidence that would point to the cause of the pump trips, it was determined that the best course of action was to initially work 1 shift per day during pump disassembly to ascertain the cause of the pump trips. In making this decision, maintenance management had the benefit of having reviewed the July 28, 1992 memo regarding the change in plant risk associated with removing a Unit 2 HPSI pump from service and considered this factor in scheduling the work on the pump.

Once the cause of the 3P019 overcurrent trips had been determined, and additional personnel gained experience on the pump, 24 hour coverage was initiated to assemble and restore the pump to service.

INITIAL UNIT 3 HPSI PUMP 3P019 PROBLEMS
(May 6, 1992 to August 13, 1992)

DATE

UNIT 2 HPSI 2P018

UNIT 3 HPSI 3P019

5/6/92

Pump tripped on overcurrent during run in an unusual alignment for check valve testing. Pump motor megged and pump IST'd satisfactory. Trip judged to be spurious and a spurious trip NCR was issued.

DATE

UNIT 2 HPSI 2P018

UNIT 3 HPSI 3P019

7/17/92

Maintenance requests Nuclear Safety Group (NSG) to perform a Probabilistic Risk Assessment for a planned three to five-week 2P018 outage, tentatively scheduled to begin in September 1992.

7/28/92

NSG reports its PRA assessment for the proposed 2P018 outage via internal memo. Memo states that the proposed outage will significantly increase plant risk and recommends that the outage be deferred to the next refueling outage.

UNIT 3 HPSI PUMP 3P019 ELECTRICAL TROUBLESHOOTING
(August 13, 1992 to August 28, 1992)

DATE

UNIT 2 HPSI 2P018

UNIT 3 HPSI 3P019

8/13/92

Pump trip on overcurrent. Non-conformance Report generated and 3P019 declared inoperable.

8/13/92-
8/28/92

Electrical trouble shooting conducted. (Meggar, hi-pot, control circuit and protective relays verified, ECAD, equipment run several times with all phase voltage and currents monitored.) No problems identified. Breaker replaced. During this period, 3P019 was started 12 times for testing and the motor tripped 3 times.

UNIT 3 HPSI PUMP 3P019 MECHANICAL TROUBLESHOOTING
(August 28, 1992 to September 5, 1992)

DATE

UNIT 2 HPSI 2P018

UNIT 3 HPSI 3P019

8/28/92-
9/3/92

Mechanical inspection of 3P019 begins with pump disassembly. Work proceeds one shift per day. Abnormal indications on pump shaft and internal damage discovered. Pump thrust bearings found installed backwards.

9/2/92

NSG and Maintenance agree to two-week 2P018 outage, with additional NSG recommended actions to minimize risk.

9/5/92

3P019 motor uncoupled test run satisfactory. Completed determination that spurious trips were not due to electrical problems.

UNIT 3 HPSI PUMP 3P019 REPAIR
(September 11, 1992 to October 18, 1992)

DATE

UNIT 2 HPSI 2P018

UNIT 3 HPSI 3P019

9/11/92

Began repairs of 3P019 pump with vendor assistance. Began working two shifts per day.

10/1/92

3P019 repairs completed. IST performed with high vibration and rubbing noted.

10/2/92

Pump disassembled with considerable internal damage observed. 24 hour per day coverage begins.

DATE

UNIT 2 HPSI 2P018

UNIT 3 HPSI 3P019

10/2/92-
10/18/92

Pump repaired, including removal of rotor and replacement of numerous parts. Pump gasket issues addressed. Pump reassembled.

10/18/92

3P019 repairs completed. Pump IST satisfactory and pump is declared operable.

10/20/92

Shift Superintendent logs note that 3P019 returned to service.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION V

1450 MARIA LANE
WALNUT CREEK, CALIFORNIA 94596-5368

MAR 19 1993

Docket Nos. 50-206, 50-361, 50-362

Southern California Edison Company
Irvine Operations Center
23 Parker Street
Irvine, California 92718

Attention: Mr. Harold B. Ray
Senior Vice President, Nuclear

SUBJECT: FINAL SYSTEMATIC ASSESSMENT OF LICENSEE PERFORMANCE (SALP) REPORT
FOR SAN ONOFRE UNITS 1, 2 AND 3 (AUGUST 1, 1991 THROUGH NOVEMBER
30, 1992)

This refers to the NRC's Systematic Assessment of Licensee Performance (SALP) Board Report Number 50-206/361/362/92-28, dated December 24, 1992, for your San Onofre Nuclear Generating Station and to the written comments provided in your February 16, 1993 letter (Enclosure 4) in response to the SALP Board's Report. The results of this assessment were discussed with you during a management meeting on January 14, 1993, as documented in Meeting Report Number 50-206/361/362/93-04, transmitted to you by our letter dated February 12, 1993 (Enclosure 3).

We have reviewed your comments made in the February 16, 1993 letter. The letter contained three comments regarding the SALP Board's Report in the areas of Maintenance/Surveillance, Engineering/Technical Support, and Safety Assessment/Quality Verification (SA/QV). We have considered these comments, as summarized below and further discussed in Enclosure 2.

Your February 16, 1993 letter provided new information to the SALP Board in stating that risk analysis information had in fact been considered by SCE management when developing the maintenance strategy to repair the High Pressure Safety Injection pump. The comments made in the Initial SALP Report were based on documented inspection report findings, discussions with SCE management, and Exit Meeting discussions which indicated that senior plant management did not consider this risk analysis information to be significant when planning the work. After consideration of this new information, the Board concluded that the associated SALP Report paragraph should be deleted (Enclosure 2, page 11). This change did not affect the SALP Board's conclusions regarding the Maintenance/Surveillance area. The Initial SALP Report, revised to reflect this change, is provided as Enclosure 2 to this letter as the Final SALP Report for San Onofre.

The NRC recognizes the progress reported by you in the commercial grade procurement area and discussed in the January 14, 1993 management meeting. However, our Initial SALP Report, which cited weaknesses in your program at that time, was based on the information available to the NRC staff in this area, as of the end of the SALP period. Based on this, the SALP Board has

determined not to revise the SALP Report and its conclusion in the area of Engineering remains unchanged.

Your February 16, 1993 letter commented that management aspects of events were evaluated in both the Engineering/Technical Support and Safety Assessment/Quality Verification (SA/QV) areas, rather than in just the Engineering/Technical Support area. This resulted in a less positive evaluation in the SA/QV area. We would agree with your comment if Engineering management had been ineffective, but upper management had interceded to effectively deal with the issues discussed. That was not the case in the issues discussed in the SA/QV area. Upper management did not intercede effectively in these cases. Therefore, the SALP Board concluded that changes to the SA/QV section of the SALP Report were not considered to be warranted.

Overall NRC conclusions are presented in Enclosure 1 to this letter. As discussed in our January 14, 1993 management meeting, the challenge for Southern California Edison Company (SCE) is to effectively use the existing management, programs and personnel to consistently achieve good performance.

In accordance with 10 CFR 2.790(a), a copy of this letter and the enclosures will be placed in the NRC Public Document Room.

Should you have any questions concerning this letter or the enclosures, we will be pleased to discuss them with you.

Sincerely,

J. B. Martin
 J. B. Martin
 Regional Administrator

- Enclosures:
1. NRC Conclusions
 2. Final SALP Report
 3. SALP Meeting Report No. 50-206, 361, 362/93-04
 4. Licensee Response to Initial SALP Report dated February 16, 1993

cc w/enclosures:

H. E. Morgan, Vice President and Site Manager (San Clemente)
 R. W. Krieger, Station Manager (San Clemente)
 State of California
 INPO