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May 8, 1989

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D. C. 20555

Gentlemen:

Subject: Docket No. 50-206
Revision to Supplement 1 to
Amendment Application No. 165
San Onofre Nuclear Generating Station
Unit 1

By letter dated May 3, 1989 SCE submitted Supplement 1 to Amendment Application No. 165. That letter provided a revision to license condition 3.M, "Cycle X Thermal Shield Monitoring Program." Following submittal of that letter we have had further discussions with members of the NRC staff in which further revisions to the license condition were requested.

Enclosure 1 is a revised license condition which incorporates NRC staff comments. We have clarified the wording of the baseline data requirement to record sixteen segments of neutron noise/loose parts monitoring, each of twenty minutes duration, changed the requirement for normal monitoring to be twenty minutes once a week instead of five minutes, and have added additional clarification that the data will be analyzed for cross power spectral density, including phase and coherence. Minor typographical errors were also corrected.

In addition to this revision of the license condition, members of the NRC staff requested that we clarify that similar techniques and equipment will be used during the mid-cycle outage to inspect the same locations as were inspected during the current outage. This will be the case.

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If you require additional information, please contact me.

Subscribed on this 8th day of May, 1989.

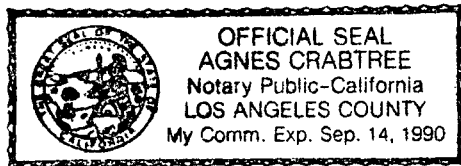
Respectfully submitted,

SOUTHERN CALIFORNIA EDISON COMPANY

By: *Kenneth P. Baskin*
Kenneth P. Baskin
Vice President

Subscribed and sworn to before me this
8th day of May 1989.

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



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By: *James A. Beoletto*
James A. Beoletto

Enclosures

cc: J. B. Martin, Regional Administrator, NRC Region V
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San Onofre Units 1, 2 and 3

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of SOUTHERN)
CALIFORNIA EDISON COMPANY)
and SAN DIEGO GAS & ELECTRIC)
COMPANY San Onofre Nuclear)
Generating Station Unit No. 1)

Docket No. 50-206

CERTIFICATE OF SERVICE

I hereby certify that a copy of the enclosed Revision to Supplement 1 to Amendment Application No. 165 dated May 8, 1989 was served on the following by deposit in the United States Mail, postage prepaid, on the 8th day of May, 1989.

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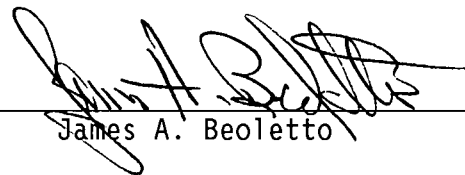
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3.M Cycle X Thermal Shield Monitoring Program

The neutron noise/loose-parts detection system shall be used to monitor the condition of the reactor vessel thermal shield throughout Cycle X or until repair. Periodic monitoring of both neutron noise and loose-parts vibrations confirms that no long term unacceptable trend of degradation is occurring. The details of this program are described below.

- (1) The unit will be shut down no later than June 30, 1990 to inspect the condition of the thermal shield.
- (2) During the first 7 days of $\geq 85\%$ power, interim acceptance criteria for neutron noise/loose-parts monitoring will be developed. These interim criteria will be utilized until the final acceptance criteria is developed.

Final acceptance criteria for neutron noise/loose-parts monitoring will be established by performing baseline evaluations for 45 calendar days at $\geq 85\%$ power following return to service for Cycle X operation. The base line data will be established by recording a minimum of 16 segments of data information, each of 20 minute duration at $\geq 85\%$ power. Adjustments to the acceptance criteria will be made for cycle burnup and boron concentration changes throughout the cycle.

- (3) The neutron noise/loose-parts monitoring system shall be OPERABLE in MODE 1 with:
 - a) At least two horizontal loose-parts detectors monitored for at least five (5) minutes 2 times per day; and,
 - b) at least three (3) neutron noise inputs monitored for at least twenty (20) minutes once a week, and be analyzed for cross power spectral density¹, including phase and coherence.
- (4) The data provided by the loose-parts/neutron noise monitor shall be analyzed once per week and compared with the established criteria. If the data exceeds the acceptance criteria:
 - a) Within 1 day the NRC will be informed of the exceedance.
 - b) Within 14 days the conditions will be evaluated and a report provided to the NRC documenting future plans and actions.

- c) The plant will be shutdown should the remaining flexure be demonstrated failed.
- (5) Each channel of the loose-part detection system shall be demonstrated OPERABLE in MODE 1 by performance of a:
- a) CHANNEL CHECK at least once per 24 hours
 - b) CHANNEL TEST at least once per 31 days

The surveillance requirements for neutron noise monitor are covered by the Appendix A Technical Specification 4.1.1 for the Power Range Neutron Flux.

- (6) With the neutron noise/loose-parts detection instrumentation inoperable for more than 30 days, prepare and submit a Special Report to the Commission pursuant to Appendix A Technical Specification 6.9.2 within the next 10 days outlining the cause of the malfunction and the plans for restoring the system to operable status.
- (7) In the case of a seismic event of 0.25g or greater as indicated on site sensors, a controlled shut down shall be initiated. Before operations are resumed, it will be demonstrated that no thermal shield damage has occurred due to the seismic event.
- (8) The provisions of Appendix A Technical Specification 3.0.4 are not applicable to this license condition.