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July 21, 1986

Director, Office of Nuclear Reactor Regulation
Attention: G. E. Lear, Director
PWR Project Directorate No. 1
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Gentlemen:

Subject: Docket No. 50-206
Supplemental Inspection Report on Emergency
Diesel Generator No. 1
San Onofre Nuclear Generating Station
Unit 1

- References: A) Letter, M. O. Medford (SCE) to G. E. Lear (NRC), dated
May 19, 1986, Inspection Report on Emergency Diesel
Generator No. 1
- B) Letter, M. O. Medford (SCE) to G. E. Lear (NRC), dated
June 20, 1986, Inspection Report on Emergency Diesel
Generator No. 2

By References A and B, Southern California Edison transmitted for
your review the results of inspections performed on Emergency Diesel
Generators (DG's) No. 1 and No. 2 at the San Onofre Nuclear Generating
Station, Unit 1, during the 1985-86 refueling outage.

Reference A reported that, in the case of DG No. 1, only one
turbocharger was inspected in accordance with the Transamerica Delaval, Inc.
diesel generator owners group recommendations and the results were favorable.
Reference B reported that, in the case of DG No. 2, all four turbochargers
were inspected and corrective actions were taken, as needed. However, the
turbochargers were operable as found.

This letter is to inform you that after DG No. 2 had been inspected,
reassembled and returned to service, the two rear turbochargers of DG No. 1
were inspected. These rear turbochargers had not been inspected, overhauled
or replaced since their original installation in 1976-77. One rear
turbocharger passed its inspection and was reinstalled and load-tested
successfully. The inspection consisted of a visual examination of the
turbocharger internals and a magnetic particle examination of the shaft thrust
bearing faces. Visual examination of the other turbocharger indicated thrust

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Mr. G. E. Lear

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bearing wear. A spare turbocharger was installed in its place for purposes of returning DG No. 1 to service. This turbocharger was then sent to the manufacturer (Elliott Company) for rework. Subsequent dye penetrant examination at the manufacturer's service center revealed cracks in the shaft thrust bearing collar.

The probable cause of the thrust bearing wear and shaft thrust collar cracks is considered to be insufficient bearing lubrication during the early years of diesel operation (1977-1982). However, this service condition was corrected in 1982 by initiating pre-lubricated test starts.

If you have any questions, please call me.

Very truly yours,

A handwritten signature in cursive script, appearing to read "M. D. Melford".

cc: R. Dudley, NRC/NRR San Onofre Unit 1 Project Manager
F. R. Huey, NRC Senior Resident Inspector, Units 1, 2 and 3
J. B. Martin, NRC Region V, Regional Administrator
D. E. Broeils, Duke Power Co., TDI DG Owners Group