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August 14, 1985

Director, Office of Nuclear Reactor Regulation Attention: Mr. J. A. Zwolinski, Chief Operating Reactors Branch No. 5 Division of Licensing U. S. Nuclear Regulatory Commission Washington, D.C. 20555

Gentlemen:

- Subject: Docket No. 50-206 Transamerica Delaval Inc. (TDI) Diesel Generators Recent 10 CFR 21 Reports from TDI San Onofre Nuclear Generating Station Unit 1
- Reference: Letter J. A. Zwolinski (NRC) to K. P. Baskin (SCE), dated June 17, 1985, Transamerica Delaval Inc. (TDI) Diesel Generators-Recent 10 CFR 21 Reports from TDI

The referenced letter requested that Southern California Edison (SCE) furnish for NRC staff review information relating to recent 10 CFR 21 reports from TDI regarding the San Onofre Unit 1 emergency diesel generators. Specifically, this information was to consist of:

- Identification of 10 CFR 21 reports issued by TDI since April 1. 1984 which concern problems potentially applicable to San Onofre Unit 1, but which are not addressed in the DR/QR Report for San Onofre Unit 1.
- 2. Actions taken by SCE to assess whether the potential problems exist at San Onofre Unit 1.
- 3. Causes of any problems that are found to exist at San Onofre Unit 1.
- Short and long term corrective actions to be taken. 4.
- 5. Implementation schedules.

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Mr. J. A. Zwolinski

August 14, 1985

The enclosed Table provides the requested information for all TDI 10 CFR 21 reports issued since April 1984 that are applicable to San Onofre Unit 1. Pending issuance of the NRC's safety evaluation for the San Onofre Unit 1 TDI diesel generators, information similar to the enclosed will be provided for any future 10 CFR 21 notifications from TDI.

If you have any questions, please call me.

Very truly yours,

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Enclosure I

cc: R. Dudley, NRC/NRR San Onofre Unit 1 Project Manager F. R. Huey, NRC Senior Resident Inspector, Units 1, 2 and 3

TABLE SHOWING SCE'S ACTIONS RELATIVE TO TDI 10 CFR 21 REPORTS

(a) Date of	(b)	(c)	(d)	(e)
<u>10 CFR 21</u> Report	<u>Potential Problem & Causes</u>	<u>Assess if Potential Problem</u> Exists at San Onofre	<u>Short & Long Term</u> Corrective Actions	<u>Implementation</u> <u>Schedules</u>
7/13/1984	A potential problem could exist with an engine exhaust or intake valve spring due to a surface imperfection which could result in engine non- availability. On a non-nuclear marine engine installation, a valve spring failed after 4500 hours of operation. By letter dated 7/13/1984 to the NRC, TDI indicated no corrective action is required due to only one failure of this type.	As a precautionary measure, the intake and exhaust valve springs were inspected during August and September diesel inspections. Results indicated all valve springs were in satisfactory condition.	None ,	N/A
7/13/1984	A potential defect exists with the high pressure fuel injection pumps. The fuel injection pumps are manufactured by Bendix Corporation, Sidney, New York. At Catawba Nuclear Site, a fuel injection pump failed. A review by Bendix indicates the cause of failure to be a material defect in the delivery valve holder. TDI recommends that no corrective action is required.	See column (d)	The fuel injection equipment settings will be reviewed and inspected on a refueling interval basis in accordance with Maintenance Procedure SOI-I-2.2. In addition, the fuel injection pumps will be sent to a vendor for inspection and calibration on a five-year interval basis.	See column (d)
10/2/1984	A potential problem exists with the engine fuel control shaft. The fuel control levers are held by friction generated by tightening a cap screw. As a safety feature, the levers are also pinned to the control shaft by using a 1/4" roll pin, which may be missing on some levers. TDI recommendation is to inspect all fuel control shafts for properly torqued fuel lever cap screws and to determine if the levers are pinned.	An inspection of the fuel control shaft linkage was performed on both engines to ensure that all fuel lever cap screws are properly torqued and all roll pins are installed. Inspection results indicated that DG #1 was missing roll pins in the control cross shaft assembly. On September 24, 1984 roll pins were installed to properly lock the positioning of the control levers at both ends of the cross shaft. Inspection results indicated that DG #2 had all recommended fuel control cross shaft roll pins installed, in accordance with TDI drawing 02-413-11.	None	N/A

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TABLE SHOWING SCE'S ACTIONS RELATIVE TO TDI 10 CFR 21 REPORTS (CONTD)

(a) <u>Date of</u> <u>10 CFR 21</u> Report	(b) Potential Problem & Causes	(c) <u>SCE's Actions to</u> <u>Assess if Potential Problem</u> Exists at San Onofre	(d) <u>Short & Long Term</u> Corrective <u>Actions</u>	(e) <u>Implementation</u> <u>Schedules</u>
1/22/85	A potential problem exists with the air filter in the engine local control panel. The air filter installed in the engine control panel has a polycarbonate transparent bowl. On November 5, 1978, the filter purchase specification was changed from the polycarbonate transparent bowl to a metal bowl. The polycarbonate bowl is now rated 150 psig at 115 ^o F whereas the alternate metal bowl is rated 250 psig at 175 ^o F. When the specification was originally issued, the vendor incorrectly rated the polycarbonate bowl at 250 psig. The TDI recommendation is to replace the polycarbonate filter bowl with a metal bowl	On February 5, 1985 an air filter inspection was performed, which indicated that both DG #1 and DG #2 have the subject polycarbonate air filters installed in the engine local control panel.	Replacement metal filter bowls were ordered from TDI and will be installed at the next plant refueling outage.	See column (d)
3/12/85*	A potential defect exists with a check valve in the engine mounted starting air piping. At Grand Gulf Nuclear Generating Station, during engine operational testing, a starting air check valve failure was experienced. It appears a piece from the bottom guide of the check valve disc broke off and was found lying on top of the piston. Grand Gulf checked the other three valves and found one valve was cracked and the remaining two were O.K. These valves were manufactured by Clow Corporation of Oskaloosa, Iowa and supplied by Williams-Hagar Co. of Pittsburgh, PA. At Shoreham, when the same valves were inspected, cracks were found in the valve body. The TDI recommendation for corrective action is to replace the existing Clow check valves in the starting air system with Mission Duo-Chek II valves, which are available from TDI.	Upon investigation, the subject valves were found to exist in the starting air system of DG #1 and DG #2 (4 valves per engine). The subject valves are also installed in the engine lube oil system (4 valves per engine), the engine fuel oil system (2 valves per engine) and the engine cooling water system (2 valves per engine).	For the starting air system, the potential problem was eliminated by procuring new Mission Duo-Chek IJ valves from TDI. The new check valves were disassembled, and a liquid penetrant test was performed to ensure that no cracks were evider prior to installation. The new valv were then installed in both engines on May 15, 1985. For the diesel engine cooling water system, a disassembly and inspection of the four subject check valves DWN-306, DWS-306, DWN-309 and DWS-309, is performed at every refue outage. These actions were original implemented in response to NRC IE Bulletin 83-03 and preliminary inspe- results were as described in Referen Per Reference 2 below, these valves included in the In-Service Testing program for pumps and valves. No valve replacement is planned.	See column (d)

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TABLE SHOWING SCE'S ACTIONS RELATIVE TO TDI 10 CFR 21 REPORTS (CONTD)

(a) <u>Date of</u>	(b)	(c) <u>SCE's Actions to</u>	(d)	(e)
<u>TU CFR 21</u> Report	Potential Problem & Causes	Assess if Potential Problem Exists at San Onofre	<u>Short & Long Term</u> Corrective Actions	<u>Schedules</u>
		-	 For the engine lube oil system and effuel oil system, no valve inspection replacement is presently planned based on satisfactory system perform over a number of years, hourly lube oil/fuel oil temperature/pressuchecks per Reference (3) below and relatively less severe valve service conditions. References: (1) SCE to NRC letter dated March 7, 1984, NRC IE Bulletin 83-03 (2) SCE to NRC letter dated April 10, 1985, Additional Changes to IST Program for Pumps and Valves. (3) SCE to NRC letter dated March 8, 1985, TDI EDG's Revised M&S Program 	ingine or nance ire
3/18/85	A potential problem exists with the oil plugs in the crankshaft assembly. At Gulf States Utilities River Bend Site, a failed crankshaft oil plug was discovered during routine maintenance. The failed plug was 22 gauge material. On 3/10/80 the oil plug material specification had been changed from 16 gauge to 22 gauge and then on 6/22/82 the material specification was changed back from 22 gauge to 16 gauge. The engines manufactured before 3/10/80 and after 6/22/82 should have original 16 gauge oil plugs unless the plugs were replaced TOI recommends that all engines be inspected to determine if any 22 gauge plugs are installed and all 22 gauge plugs be replaced with 16 gauge plugs.	The 10 CFR 21 report did not list San Onofre Unit 1 as being one of the affected power plants. Upon SCE inquiry, TDI confirmed that based on their records there was very little chance that the original 16 gauge oil plugs had been replaced with 22 gauge plugs.	As a precautionary measure, at the next refueling outage both diesel engines will be inspected for crankshaft 22 gauge oil plugs. Any 22 gauge oil plugs will be replaced with 16 gauge plugs.	See column (d)

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