

Transamerica Delaval Inc. Enterprise Engine Division Enterprise Way & 85th Avenue P.O. Box 2161 Oakland, California 94621 (415) 577-7400

February 19, 1986

Report #134

Director, Office of Inspection and Enforcement U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Dear Sir:

In accordance with the requirements of Title 10, Chapter 10, Code of Federal Regulations, Part 21, Transamerica Delaval hereby notifies the Commission of a potential defect in a component of a DSR or DSRV Standby Diesel Generator. There could exist a potential problem with a K-1 Relay in the generator voltage regulator.

Transamerica Delaval has supplied DSR and DSRV series engines with this potential problem to the following nuclear sites:

Utility	Site	Serial #	Model
Long Island Lighting	Shoreham	74010-12	DSR-48
Carolina Power	Shearon Harris	74046-49	DSRV-16-4
Cleveland Electric	Perry	75051-54	DSRV-16-4
Texas Utilities	Commanche Peak	76001-04	DSRV-16-4
TVA	Hartsville/Phipps Bend	77024-35	DSRV-16-4

A recently completed analysis indicates that the K-1 relay was supplied to these sites with an incorrect voltage range. The relays have been environmentally qualified to IEEE-323 with a 100-140 VDC operating range whereas customer specifications require a 90-140 VDC range.

The K-l relay is manufactured by Gould/ITE (now Telemecanique) and is mounted in the Generator Control Panel. This panel is part of the Standby Diesel Generator system supplied by Transamerica Delaval.

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This relay is interconnected in the field flash circuit and must operate properly for field flash operation to begin. DC voltage is provided for engine-generator startup from customer supplied on-site battery sources. If the voltage supplied is between 90-100 VDC, the K-1 relay may not operate properly, adversly affecting generator output.

Immediate correction of this problem is necessary. This can be effected in either of two ways; the Utility can modify its DC voltage source and specification to assure a supply range of 100-140 VDC or the voltage regulator circuitry can be modified to reliably accept a DC voltage supply in the 90-140 VDC range. Since action is required by others, we cannot estimate when the corrective action will be completed.

A copy of this letter will be sent to all of the sites referenced in paragraph 2 of this letter as indicated by the carbon copy list.

Our evaluation of this matter was concluded on February 14, 1986.

Very truly yours,

B.C. Guntrum Manager, Quality Assurance

BCG:ddm

cc: LILCO CP&L CEI TUSI TVA Stride

Transamerica Delaval

cc: Long Island Lighting Co. Shoreham Nuclear Power Station North Country Road Wading River, New York 11791

> Attn: Manager, Nuclear Operations Support Department

Carolina Power & Light Co. Shearon Harris Nuclear Plants P.O. No. 101 New Hill, North Carolina 27562

Attn: Mr. R.A. Watson, Vice President Mr. L.I. Loflin, Harris Plant Eng. Mr. N.J. Chiangi, Manager, Q.A.

Cleveland Electric Illuminating Co. c/o Perry Nuclear Power Plant P.O. Box 97 Perry, Ohio 44081

Attn: Mr. C.M. Shuster, Manager Nuclear Quality Assurance

Texas Utilities Services Inc. P.O. Box 2300 Glen Rose, Texas 76043

Attn: Mr. J.T. Merritt, Jr. Engineering & Construction Mgr.

TVA Hartsville W10 D224-400 Commerce Avenue Knoxville, Tennessee 37902

Attn: Mr. C.A. Chandley Chief, Mech. Eng. Branch