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RELATED CORRESPONDENCE

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

July 17, 1985

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OFFICE OF SECRETARY
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BRANCH

James P. Gleason, Chairman
Administrative Judge
513 Gilmoure Drive
Silver Spring, MD 20901

Dr. Jerry R. Kline
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Mr. Glenn O. Bright
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

In the Matter of
CLEVELAND ELECTRIC ILLUMINATING COMPANY, ET AL.
(Perry Nuclear Power Plant, Units 1 and 2)
Docket Nos. 50-440 OL, 50-441 OL

Dear Administrative Judges:

For your information, I am forwarding to you recent correspondence from Cleveland Electric Illuminating Company concerning the applicability of recent 10 CFR § 21 notifications by Transamerica Delaval, Inc. to the diesel generators at the Perry plant.

Sincerely,

Colleen P. Woodhead
Counsel for NRC Staff

Enclosure: As stated

cc w/ enclosure: Ms. Hiatt
Mr. Lodge
Mr. Silberg

cc w/o enclosure: Rest of service list

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MURRAY R. EDELMAN
VICE PRESIDENT
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July 2, 1985
PY-CEI/NRR-0285 L

Mr. B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Perry Nuclear Power Plant
Docket Nos. 50-440; 50-441
TDI Diesel Generators
10CFR21 Notifications

Dear Mr. Youngblood:

Attached is the information you requested by letter dated June 21, 1985, regarding recent 10CFR21 notifications made by Transamerica Delaval Inc. Since April 1984, there have been two (2), Part 21 notifications applicable to the Perry EDG's which have not been addressed in the DR/QR report. As explained in the attachment to this letter, neither of these presents a problem for Perry.

Please feel free to contact me if you have any questions concerning this matter.

Very truly yours,

Murray R. Edelman
Vice President
Nuclear Group

MRE:njc

Attachment

cc: Jay Silberg, Esq.
John Stefano (2)
J. Grobe

Add: IE/DEPER/EAB 1 1 Ltr Encl
IE/DRAVT/VPB 1 1
3001
1/1

ATTACHMENT

10CFR21 Notifications Made by Transamerica Delaval Inc.

Applicable to PNPP Which Are Not Addressed in the DR/QR

April 1984 - June 1985

Crankshaft Oil Plugs

TDI notified NRC on March 18, 1985, of a potential defect in the crankshaft oil plugs of DSR and DSRV-16 diesel generators. The oil plug material specification was changed in March 1980 from 16 gauge to 22 gauge. The material specification was subsequently changed in June, 1982 to require 16 gauge once again. Thus, as TDI indicated, engines manufactured prior to March, 1980 and after June, 1982, should have 16 gauge oil plugs installed unless a changeout has occurred.

CEI purchased four (4) model DSRV-16 diesel generators in 1978 from TDI. These were purchased with 16 gauge oil plugs. None of the oil plugs have been replaced. Additionally, we have performed an inspection of all oil plugs and found them all to be 16 gauge. Therefore, this defect does not present a problem at Perry.

Clow Williams-Hagar Check Valves

Transamerica Delaval Inc. (TDI) notified the NRC on March 12, 1985 of a potential defect with Williams-Hagar three (3) inch, style 329, check valves used in the Starting Air Systems of certain TDI diesel generators. The Starting Air Systems on the PNPP TDI engines do not utilize these valves. The PNPP TDI engines do, however, use different size Williams-Hagar check valves in the Lubricating Oil Systems. Five (5) Williams-Hagar, style 329, check valves ((2) - 6" 125 psi; (2) - 2" -150 psi; (1) - 2 1/2 - 125 psi) are used in these systems. Although the valves are similar to those reported by TDI as being a problem in the Starting Air Systems, the application at Perry is significantly different and is considered acceptable for the following reasons:

1. The Starting Air check valves fail due to high and low cycle fatigue caused by the valve being opened suddenly by a surge of 200 to 250 psi compressed air from the air receiver tanks. Upon receipt of an engine start signal, the starting air solenoid valves open rapidly, allowing air receiver tank pressure to open the check valves and pressurize the air headers. After several hundred starts, valve failure may occur in this application. In contrast, the Lube Oil check valves open as lube oil flow and pressure increase on pump start-up. This results in a relatively slow, steady increase in pressure from 0 to 50 psi allowing the valve to open slowly as pressure increases and overcomes check valve spring tension. This type of actuation results in minimal stress on the valve.

2. The Starting Air check valves are maintained normally closed by only a light spring tension, allowing them to vibrate during engine operation. This results in high cycle fatigue and fretting. The Lube Oil check valves, on the other hand, are either open, or are held closed by oil pressure and spring tension (to prevent backflow) during engine operation. This virtually eliminates the stress resulting from engine vibration mentioned above.

3. The opening shock to the Lube Oil check valve(s) is further dampened by the high viscosity of the lube oil in the system which prevents the fast operation of these valves.

The TDI Owners Group has performed a review of the Williams-Hagar check valves used in the Lube Oil System and has concluded that they are acceptable for their intended service. Based upon this and upon the discussion above, we conclude that the Williams-Hagar Check Valves are acceptable for use at Perry in the Lube Oil System of the diesel generators.