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MURRAY R. EDELMAN
VICE PRESIDENT
NUCLEAR

October 26, 1984

Mr. James G. Keppler
Regional Administrator, Region III
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137

RE: Perry Nuclear Power Plant
Docket Nos. 50-440; 50-441
Standby Diesel Generator
Voltage Regulator [RDC 117(84)]

Dear Mr. Keppler:

This letter serves as the final report pursuant to 10CFR50.55(e) concerning a potential deficiency in Standby Diesel Generator Voltage Regulators supplied by Transamerica Delaval, Inc. Mr. R. Knop of your office was first notified on October 1, 1984, by Mr. E. Riley of The Cleveland Electric Illuminating Company (CEI) that this matter was being evaluated for applicability to the Perry Nuclear Power Plant (PNPP) per our Deviation Analysis Report 203.

This report contains a description of the deficiency, an analysis of the safety implication, and corrective action to be implemented.

Description of Deficiency

The potential deficiency exists in the Standby Diesel Generator Voltage Regulator. When the Diesel Generator is started, field flashing of the Generator occurs, as properly designed, for a period of less than ten seconds.

In the present configuration, however, when the Diesel Generator is tripped, the field is also flashed when the unit coasts down. When field flashing occurs, the field flash resistors are energized. On coast down, the field flash resistors could be energized for as long as 60 seconds. When these resistors are energized for this extended period, excessive temperature rise could be created within the Generator Control Panel and expose components close to the field flash resistors to excessively high temperatures.

This item was reported to the NRC on September 18, 1984, by Transamerica Delaval as a 10CFR21 notification.

Analysis of Safety Implication

Excessive temperature exposure of components close to the field flash resistors in the Generator Control Panel could result in overheating of those components which could in turn result in non-availability of the affected Standby Diesel Generator.

Corrective Action

An Engineering Change Notice is being issued to implement the recommendations of the Transamerica Delaval Service Information Memo 366 for Generator Field Flashing Circuit Modification. This modification is anticipated to be completed by December 1, 1984, for Unit 1. Subsequent to this modification, verification that field flashing has been eliminated during coastdown, after a stop signal, will be conducted during initial checkout and run-in of the Unit 1 Standby Diesel Generator Systems.

Field Flashing Circuit Modification and subsequent verification will be completed prior to preoperational testing for Unit 2.

Please call if there are any additional questions.

Sincerely,

A. Kaplan for M. Edelman

Murray R. Edelman
Vice President
Nuclear Group

MRE:pab

cc: Mr. J. A. Grobe
NRC Site Office

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