



# THE CLEVELAND ELECTRIC ILLUMINATING COMPANY

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July 10, 1984

MURRAY R. EDELMAN

VICE PRESIDENT

NUCLEAR

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  
Pacific Air Products Co.  
Linear Converters [RDC 94(84)]

Dear Mr. Keppler:

This letter serves as our final report pursuant to 10CFR50.55(e) concerning a potential problem with premature failure of linear converters on multi-blade dampers and louvers utilized in safety-related heating, ventilation, and air conditioning (HVAC) systems. Mr. P. Pelke of your office was first notified on February 16, 1984, by Mr. B. Walrath of The Cleveland Electric Illuminating Company (CEI) that this matter was being evaluated for applicability to the Perry Nuclear Power Plant.

This report contains a description of the potential deficiency and of the evaluation of this condition. As a result of our evaluation, it has been determined that this condition is not reportable pursuant to 10CFR50.55(e).

## Description of Deficiency

On February 1, 1984, the Pacific Air Products Co. (PAPCO) notified CEI that they had filed a 10CFR21 notification with the NRC relative to a problem identified with a linear converter unit which had shown signs of excessive wear in service. This problem was identified at a non-nuclear generating plant, however, PAPCO had furnished 52 of the potentially deficient converters to the Perry Nuclear Power Plant through our HVAC supplier, the Robert Irsay Company.

## Evaluation of Potential Deficiency and Action To Be Taken

PAPCO has confirmed through extensive investigation and testing that the abnormal wear on the linear converters was caused by actuator oscillation, normally called "hunting".

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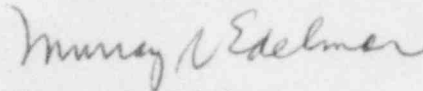
As a result of the PAPCO investigation, it was reported that if the linear converters are put on a regularly scheduled maintenance program and lubricated before and during service in accordance with a lubrication procedure, based on frequency of various converter operations, the linear converter can absorb system abnormalities without abnormal wear to the converters. PAPCO accordingly has offered recommendations for maintenance programs and a maintenance/rebuilding program.

Implementation of the PAPCO maintenance recommendations will assure operability of the linear converters for the forty year life of the plant.

Site generated nonconformance reports P049-2711 and P049-2712 were initiated to address the PAPCO 10CFR21 Report. These NRs will be dispositioned in accordance with the PAPCO recommendations, based on damper/louver application.

The linear converter wearing, due to lack of lubrication, does not constitute a reportable incident since the possible failure of operation of the linear converter is due to wearing of the shaft over a prolonged period of time. This slow wearing time would allow operator action prior to any ventilation system failure.

Sincerely,



Murray R. Edelman  
Vice President  
Nuclear Group

MRE:pab

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

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