



THE CLEVELAND ELECTRIC ILLUMINATING COMPANY

P.O. BOX 5000 - CLEVELAND, OHIO 44101 - TELEPHONE (216) 622-9800 - ILLUMINATING BLDG. - 55 PUBLIC SQUARE

Serving The Best Location in the Nation

MURRAY R. EDELMAN

VICE PRESIDENT
NUCLEAR

April 27, 1983

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
Potential Breach of Seal Integrity
Defect of Hydrogen Igniters
[RDC 65(83)]

Dear Mr. Keppler:

This letter serves as the Final Report pursuant to 10CFR50.55(e) concerning the potential breach of seal defect associated with hydrogen igniters Model 6043, supplied by Power Systems, a Morrison-Knudsen Division. This condition was first reported to Mr. F. Jablonski of your office on February 7, 1983, by Mr. J. Kerr for The Cleveland Electric Illuminating Company (CEI). The previous report filed on this subject was dated March 9, 1983.

This report includes a description of the deficiency, an analysis of safety implication and the corrective action taken.

Description of the Deficiency

Power Systems is supplying hydrogen igniters Model 6043 for the Perry Nuclear Power Plant (PNPP) Units 1 & 2 that will be used inside containment. On January 28, 1983, Power Systems notified the Nuclear Regulatory Commission under 10CFR21 that a potential defect had been identified concerning breach of seal integrity of the hydrogen igniter glow plug component. This notification was transmitted to CEI by Power Systems letter dated February 2, 1983.

The potential breach of seal integrity defect affected only the initial shipment of 24 hydrogen igniters. The defect occurred in the cover plate assembly which houses the glow plug. It has been determined by the vendor that the potential breach of seal integrity was caused by leakage past the seating surface between the glow plug and cover plate and subsequently through the ceramic material which covers the exposed tip of the glow plug.

Analysis of Safety Implication

The design function of the seal in the hydrogen igniter tip component is to prevent outside gas from leaking into the igniter chamber. Potential pressure inside the containment after a LOCA could force gases into the igniter chamber. This failure would result in damage to the device rendering it ineffective.

8305040496 830427
PDR ADOCK 05000440
S PDR

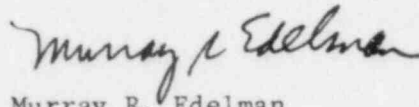
IE27
MAY 2 1983

Corrective Action

The potentially defective initial shipment of twenty-four (24) hydrogen igniters was returned to Power Systems, a Morrison-Knudsen Division, Rocky Mount, North Carolina, on February 2, 1983. Power Systems reworked and/or repaired the subject igniters and returned the same to the site on March 8, 1983. Subsequent to the return of the hydrogen igniters, manufacturing surveillance personnel witnessed 100% of the pneumatic retest performed on the coverplate assembly with the installed glow plug with satisfactory results. In addition, 100% witnessing was accomplished on all the remaining hydrogen igniters supplied on this contract, also with satisfactory results.

Please call if there are additional questions.

Sincerely,



Murray R. Edelman
Vice President
Nuclear Group

MRE:pab

cc: Mr. M. L. Gildner
NRC Site Office

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

U.S. Nuclear Regulatory Commission
c/o Document Management Branch
Washington, D.C. 20555

Records Center, SEE-IN
Institute of Nuclear Power Operations
1100 Circle 75 Parkway, Suite 1500
Atlanta, Georgia 30339