

PART 21 IDENTIFICATION NO. 81-416-000 COMPANY NAME Cleveland Elect. Illuminating

DATE OF LETTER 4/28/81 DOCKET NO. 50-440/441

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ACTION:

PRELIMINARY EVALUATION OF THE ATTACHED REPORT INDICATES LEAD RESPONSIBILITY FOR FOLLOWUP AS SHOWN BELOW:

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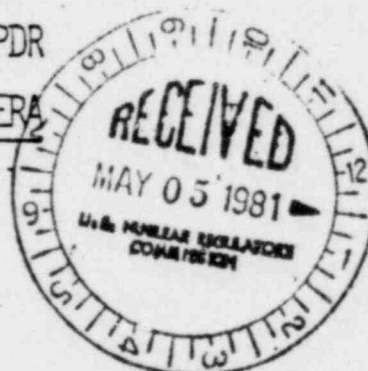
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SAFEGUARDS (S) ☐

IE FILES

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CENTRAL FILES (CHRON)

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PDR

LPDR

~~TERA~~



Gilbert/Commonwealth engineers and consultants

GILBERT ASSOCIATES, INC., P. O. Box 1498, Reading, PA 19603/Tel. 215-775-2600/Cable Gilasoc/Telex 836-431

April 28, 1981

United States Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, Pennsylvania
19406

Attention: Mr. Boyce H. Grier, Director

Re: Reportable Defect - 10CFR21
Containment Penetration Anchor Plates

Dear Mr. Grier:

This documents a telephone call made to Mr. A. Finkel, Electrical Section Chief, Region I, at 11:52 A.M. on April 24, 1981.

Name of Individual Who Reported

Mr. N. R. Barker, Vice President and General Manager of the Quality Assurance Division of Gilbert/Commonwealth at the above address.

Facility Involved

Perry Nuclear Power Project, Units 1 and 2, being constructed by the Cleveland Electric Illuminating Company.

Components Involved

Mechanical penetration attachment plates. See Attachment I for the specific penetrations involved. The attachment plates were furnished by Pullman Power Products, Williamsport, Pennsylvania.

Nature of Defect/Failure to Comply

Anchor and barrier plates, which attach piping to the Class MC containment penetration sleeves, were not impact tested or normalized (depending on thickness) as required by the ASME Code, Section III, Subsection NE, paragraph 4431. The piping procurement specification, SP-527-4549-00, Rev. IX, prepared by Gilbert Associates, Inc. (GAI), did not require impact testing for Safety Class 2 and 3 piping and component support materials, except where

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specified on the design drawings. The design drawings furnished by GAI to the fabricator specified fabrication to Section III but did not specifically state that impact testing was to be performed and did not include the service temperature.

Brittle failure of the anchor plates under postulated accident conditions could result in potential off-site exposures exceeding allowable limits. This represents a failure to comply with 10CFR50, Appendix A, Criterion 51.

Date Information Obtained

Results of the GAI investigation of the problem were presented to the QA Division General Manager on the morning of April 24, 1981.

Corrective Action

The fabricator was directed to identify the heat numbers for anchor plates and barrier plates which they had furnished. Impact tests were run on all eleven heats. Results of the impact tests showed that four of these heats were unsatisfactory.

Piping assemblies containing anchor plates made from the unacceptable heats are being returned to the fabricator. The assemblies will be repaired or replaced using plate material from acceptable heats. These assemblies are shown on Attachment I. Barrier plates with improper heat treatment or inadequate impact properties are also being replaced on the listed assemblies. Completion of the installation of the corrected assemblies will be accomplished by August 31, 1981 for Unit 1 and December 31, 1982 for Unit 2.

It has been determined that appropriate impact testing has been performed for all other Perry penetrations. In addition, a review has been made of all other GAI design projects. It has been determined that a similar problem does not exist on those projects.

Specification SP-527-4549-00 has been revised (Rev. XI, dated April 8, 1981) to specifically address the material requirements for the assemblies. The revised specification will be issued by June 30, 1981.

To prevent recurrence of this problem, the Mechanical Department Manager will issue an instruction to department personnel by June 1, 1981.

Additional Information

Since GAI does not know whether material from the affected heats has been incorrectly applied on projects other than our own, we are forwarding a copy of this report to the fabricator, Pullman Power Products.



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If you require any further information on this matter, please contact me at (215) 775-2600, extension 2285.

Very truly yours,

N. R. Barker
Vice President and General Manager
Quality Assurance Division

NRB:ldk

CC: H. Lorenz
T. M. Demers
W. B. Shields
V. Stello - USNRC, Office of Inspection & Enforcement, Washington, D.C.
20555 (3 copies)
J. Coleman - Pullman Power Products
J. Johns - Pullman Power Products

ATTACHMENT I

 PERMITS 2
 CONTAINMENT PENETRATION ANCHOR PLATES
 WITH DEFICIENT IMPACT PROPERTIES
UNIT 1

<u>Pen. No.</u>	<u>GAI Dwg.</u>	<u>Material</u>	<u>Heat No.</u>
**P104	B-312-648	SA516, Gr. 70	89524-26
**P105	B-312-632	SA516, Gr. 70	87339-67
P108	B-312-632	SA516, Gr. 70	401K2511
**P109	B-312-632	SA516, Gr. 70	87303-67
**P111	B-312-632	SA516, Gr. 70	87303-67
P114-2	B-312-638	SA516, Gr. 70	401K2511
**P120	B-312-632	SA516, Gr. 70	87303-67
P208-2	B-312-638	SA516, Gr. 70	401K2511
**P302	B-312-643	SA516, Gr. 70	89524-26
P310	B-312-633	SA516, Gr. 70	401K2511
P311	B-312-633	SA516, Gr. 70	401K2511
P404	B-312-633	SA516, Gr. 70	401K2511
P405	B-312-633	SA516, Gr. 70	401K2511
**P407	B-312-632	SA516, Gr. 70	87339-67
P408	B-312-632	SA516, Gr. 70	401K2511
P409	B-312-632	SA516, Gr. 70	401K2511
P428-2	B-312-638	SA516, Gr. 70	401K2511
P436-2	B-312-638	SA516, Gr. 70	401K2511
*P117	B-312-648	SA516, Gr. 70	89524-26
*P406	B-312-632	SA516, Gr. 70	89524-26

UNIT 2

P104	B-362-633	SA516, Gr. 70	401K2511
P105	B-362-633	SA516, Gr. 70	401K2511
P106	B-362-632	SA516, Gr. 70	87339-67
**P107	B-362-648	SA516, Gr. 70	89524-26
P121-2	B-362-638	SA516, Gr. 70	401K2511
P122-2	B-362-638	SA516, Gr. 70	401K2511
P201	B-362-633	SA516, Gr. 70	401K2511
P202	B-362-633	SA516, Gr. 70	401K2511
**P211	B-362-643	SA516, Gr. 70	89524-26
P309-2	B-362-638	SA516, Gr. 70	401K2511
P404	B-362-632	SA516, Gr. 70	401K2511
P405	B-362-632	SA516, Gr. 70	401K2511
P409	B-362-632	SA516, Gr. 70	401K2511
P416-2	B-362-638	SA516, Gr. 70	401K2511
P424	B-362-632	SA516, Gr. 70	401K2511
P426	B-362-632	SA516, Gr. 70	87303-67
**P428	B-362-632	SA516, Gr. 70	87303-67
*P127	B-362-645	SA516, Gr. 70	89524-26
*P128	B-362-645	SA516, Gr. 70	89524-26
*P427	B-362-632	SA516, Gr. 70	89524-26

* Only barrier plate requires replacement.

** Both barrier plate and anchor plate require replacement.