

## THE CLEVELAND ELECTRIC ILLUMINATING COMPANY

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Dalwyn R. Davidson vice president system engineering and construction

February 26, 1982

Mr. James G. Keppler Director, 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; Final Report on Unit II Polar Crane Girder Weld Deficiencies (RDC 39(81))

Dear Mr. Keppler:

This letter serves as a Final Report pursuant to 10CFR50.55(e) concerning weld defects in the Polar Crane Box Girder for the Unit II Containment. This was first reported by Mr. V. Higaki of The Cleveland Electric Illuminating Company to your Operations Center, Bethesda, Maryland, on October 17, 1981.

This report includes a description of the deficiency, analysis of the safety implications, and corrective action.

## DESCRIPTION OF DEFICIENCY

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The Polar Crane Box Girder which will support the Polar Crane in the Unit II Containment was fabricated in ten sections by Newport News Industrial in their Greenville, Tennessee (GMM) facility under Procurement Specification SP-660-4549-00. During visual inspection prior to erection, a number of surface weld defects such as undercut, porosity, and insufficient leg were identified and documented on Nonconformance Report No. 17-136. The Perry Project Organization directed Newport News Industrial of Ohio (NNICO) to proceed with the repair of these nonconforming welds. During the repair of these weld defects, it was determined that a number of sub-surface linear defects existed in the shop welds.

## ANALYSIS OF THE SAFETY IMPLICATIONS

Had the deficient welds in the Unit II Polar Crane Box Girder remained undetected and a section of this girder failed to perform its design function, it can be postulated that the safety of Polar Crane lifting operations might have been adversely affected.

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## CORRECTIVE ACTION TAKEN TO DATE

In order to determine the extent of weld defects present, an information ultrasonic test examination was conducted on all welds identified as strength welds per the design basis utilized by Newport News Industrial of Virginia. These welds are as follows:

- 1. Face plate to top flange
- 2. Face plate to bottom flange
- 3. Tee stiffener weld to top flange

The only welds not UT examined were the excavated joints undergoing repair which were identified on Nonconformance No. 17-136.

Newport News Industrial has stated that approximately 90% of the total length of welds which were UT examined are rejectable and will be repaired and brought into full compliance with specification requirements. All rejectable areas shall be excavated in order to remove defects. The excavated areas shall be magnetic particle examined prict to welding. Once the repair weld is completed, it will be visually inspected and MT examined in accordance with approved procedures. All repair weld activities will be monitored by NNICO weld engineering section.

Anticipated completion of this activity is July 30, 1982.

Sincerely,

Dalug P. Davilan

Dalwyn/R. Davidson, Vice President System Engineering and Construction

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cc: NRC Site Office

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

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