



**Consumers
Power
Company**

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June 20, 1979
Howe-175-79

Mr J G Keppler, Regional Director
Office of Inspection and Enforcement
Region III
US Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

MIDLAND NUCLEAR PLANT
UNIT NO 1, DOCKET NO 50-329
UNIT NO 2, DOCKET NO 50-330
IMPACT TESTED - ITT GRINNELL SUPPLIED MAIN FEED PIPE

In accordance with the requirements of 10 CFR 50.55(e), this letter constitutes an interim report on the status of the main feedline pipe spools supplied by ITT Grinnell and which have some impact values not acceptable to the ASME Boiler and Pressure Vessel Code.

The attachments to this letter provide a description of the discrepancy, potential safety implications, investigation and planned corrective actions.

The main steam and main feed piping material test results were reviewed on June 14, 1979 at ITT Grinnell in Kernersville, NC. The following was determined:

1. As reported by ITT Grinnell, Heat N32762 did not meet Charpy impact test requirements at 30°F.
2. Heat L20479 was accepted by ITT Grinnell on the basis of a subsequent heat treatment and a third test. The subsequent heat treat of the test samples was in a laboratory furnace.
3. One spool from Heat N32762 required bending, using Grinnell procedures which require elevated temperatures in the bend area. Samples cut from the spool in the heat affected area did not meet Charpy test requirements at 30°F. This spool is on "hold" at Grinnell.

It is our interpretation that pipe can be impact tested a third time according to SA-106/SA-530 if a thermal treatment is utilized to improve the fracture properties of the as-rolled material.

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Follow up actions include obtaining:

1. A disposition of the one heat (N32762) which had unacceptable fracture properties at 30⁰F.
2. A rationale for the retesting and acceptance of heat L20479 which had ASME Section III Code acceptable fracture properties after stress relief heat treatment.
3. A disposition of three spools subjected to the bending process.

Further status of these actions will be provided in the next interim (or final) report which will be submitted by August 1, 1979.

Stephen D. Dowell

Enclosures: (1) Management Corrective Action Report MCAR-1, Report No 29, Revision 1, dated May 25, 1979

(2) MCAR-29, Interim Report No 1, dated June 13, 1979

CC: Director of Office of Inspection & Enforcement
Att: Mr John G Davis, Acting Director, USNRC (15)

Director, Office of Management
Information and Program Control, USNRC (1)

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**QUALITY ASSURANCE PROGRAM
MANAGEMENT CORRECTIVE ACTION REPORT
MCAR-1**

REPORT NO. 29
May 25, 1979 Rev. 1
DATE May 22, 1979

JOB NO. 7220Q NO. 4.383, 4.393**I *DESCRIPTION (Including references):**

On May 21, 1979, ITT Grinnell notified Bechtel that nine (9) pipe spools fabricated from Heat No. N32762 failed to meet the physical impact requirements for the material. The nine (9) spools identified are for the Feed Water System as listed below:

1-ELB-1-S-638-13-3	1-ELB-2-S-638-13-5	2-ELB-1-S-639-13-3A
1-ELB-2-S-638-13-3	1-ELB-2-S-638-13-6	2-ELB-2-S-639-13-3
1-ELB-2-S-638-13-4	2-ELB-1-S-639-13-3	2-ELB-2-S-639-13-4

NCR 2211 has been written and tags applied to identify these spools.

***RECOMMENDED ACTION (Optional)**

- 1) All impact tested materials furnished by ITT Grinnell should be investigated to determine that acceptable test results can be related to the materials and the material condition furnished.
- 2) Those corrective actions taken by ITT Grinnell to comply with procurement documents subsequent to the non conformance identified in QA Flyer 76-F8, dated 12/15/76 should be examined.

Continued on Page 2

REFERRED TO ☒ ENGINEERING ☐ CONSTRUCTION ☐ QA MANAGEMENT ☐ _____
☐ PROCUREMENT

Potentially Reportable

ISSUED BY

Project QA Engineer

Date

II REPORTABLE DEFICIENCY☐ NO☐ YESNOTIFIED CLIENT 5/22/79

Date

Project Manager

Date

III CAUSE

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CORRECTIVE ACTION TAKEN

RECEIVED
MAY 30 1979

QUALITY ASSURANCE

AUTHORIZED BY _____

Date

STANDARD DISTRIBUTION

DIVISION QA MANAGER
MANAGER OF QA - TPO
GPD - QA MANAGER
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PF OCE
DIVISION PROCUREMENT MGR
PROJ PROCUREMENT MGR
DIV SUPPLIER QUALITY MGR

FORMAL REPORT TO CLIENT _____
(If Section II Applies)

Date

CORRECTIVE ACTION IMPLEMENTED

VERIFIED BY _____

Project QA Engineer

Date

MANAGEMENT CORRECTIVE ACTION REPORT
REPORT 29, Rev. 1

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Recommended Action - continued.

- 3) A review of ITT Grinnell records for impact tested materials should be performed. The review should address test results, the number of tests performed, that test samples are representative of the fabricated material and condition, that the temperature at which tests were performed was correct and any additional factors which would affect the acceptability of the test results.
- 4) Based on the results of item 1 thru 3 above, analyze the effect the identified materials could have on plant safety if uncorrected.
- 5) Based on items 1 thru 4 above, evaluate reportability under 10 CFR 50.55(e) by June 14, 1979. The PQAE and Project Manager should be notified immediately when the reportability status is determined.
- 6) If the material is found to be unsatisfactory for its intended use, implement those corrective actions necessary to assure that the completed systems will meet FSAR commitments.
- 7) State what steps ITT Grinnell has taken to prevent recurrence.

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