Consumers Power Company

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January 16, 1984 83-15 #1

Mr J G Keppler, Regional Administrator
US Nuclear Regulatory Commission
Region III
799 Roosevelt Road
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MIDLAND ENERGY CENTER PROJECT
DOCKET NOS 50-329 AND 50-330
NON-SEISMICALLY SUPPORTED COMPONENT COOLING WATER PIPING SYSTEM
FILE: 0.4.9.87 SERIAL: 26665

On December 16, 1983, Consumers Power Company notified your staff of a potential 10CFR50.55(e) condition involving the attachment of non-Q/non-seismic piping to the component cooling water system.

This letter is an interim 10CFR50.55(e) report. The attachments to this letter describe the concern and summarize the investigation and corrective action taking place.

Another report, either interim or final, will be sent on or before April 20, 1984.

James W. Cook

JWC/AHB/1r

Attachments: (1) MCAR-1, Report No 79, dated December 19, 1983

(2) MCAR-79, Interim Report 1, dated January 9, 1984

CC: Document Control Desk, NRC
Washington, DC

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INPO Records Center

OC0184-0031A-MP01

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137660

Attachment
Serial 26665
83-15 #1

BECHTEL POWER CORPORATION

QUALITY ASSURANCE PROGRAM

MANAGEMENT CORRECTIVE ACTION REPORT

MCAR-1 REPORT NO. 79

JOB NO. 7220 Q NO. _____ DATE 12/19/83

I* DESCRIPTION (Including references):

A potential deficiency has been identified concerning non-Q piping connected to Q-list equipment. Specifically, a condition exists where non-Q/non-seismically supported component cooling water piping is connected to Q-listed letdown coolers in the reactor building, as follows:

(continued)

* RECOMMENDED ACTION (Optional)

1) Perform an evaluation to determine what impact this condition would have on the safety of operations at Midland if left uncorrected.

2) If, as a result of Item 1) above, the affected hardware is found to be nonconforming, initiate proper controls in accordance with project procedures for nonconforming items.

(continued)

REFERRED TO ☒ ENGINEERING ☐ CONSTRUCTION ☐ QA MANAGEMENT ☐ _____

☐ PROCUREMENT

ISSUED BY JECrosby 12/19/83
for Project QA Engineer Date

**This condition was reported to the NRC by the client as a potential 10 CFR-50.55(e) on 12/16/83.

II REPORTABLE DEFICIENCY

☐ NO ** ☒ YES

NOTIFIED CLIENT

Project Manager KEW 12/20/83
Date

III CAUSE

CORRECTIVE ACTION TAKEN

AUTHORIZED BY _____
Date

STANDARD DISTRIBUTION

DIVISION QA MANAGER
MANAGER OF QA - BPC
GPD - QA MANAGER
LAPD QA MANAGER
SFPD QA MANAGER
PROJECT MANAGER
CLIENT

ADDITIONAL DISTRIBUTION - AS APPROPRIATE

ENGINEERING MANAGER
PROJECT ENGINEER
QE SUPERVISOR

CONSTRUCTION MANAGER
PROJ SUPT/PROJ CONSTR MANAGER
CHIEF CONSTR QC ENGINEER

DIVISION PROCURENT MGR
PROJ PROCUREMENT MGR
PROCUREMENT SUPPLIER QUALITY MGR AND
DIV SUPPLIER QUALITY MGR

FORMAL REPORT TO CLIENT _____
(If Section II Applies) Date

CORRECTIVE ACTION IMPLEMENTED

VERIFIED BY _____
Project QA Engineer Date

*Describe in space provided and attach reference document.

AAPD-0161

137660

Description (continued):

Unit Number	Line Number	Line Class	Equipment Number	Equipment Class	Reference Document
Unit 1	6" 1HBD-448 thru 451	Non-Q	1E-57A&B	Q	H-616SH5(Q)
Unit 2	6" 2HBD-448 thru 451	Non-Q	2E-57A&B	Q	H-617SH1(Q)

Assuming a worst case condition, the possibility exists that the non-seismically supported component cooling lines connected to the letdown coolers could fail during a seismic event. If this piping were to collapse during an earthquake, significant loads would be transferred through the coolers and into the equipment support structure, possibly causing failure of the supports and collapse of the coolers. This occurence would result in a subsequent failure of the safety related piping connected to the coolers, thereby possibly causing a breach of the reactor coolant pressure boundary.

Recommended Action (continued):

3) Perform a review to determine if similar conditions exist where non-Q systems are connected to safety related equipment.

4) If deficiencies are identified from Item 3) above, perform an evaluation to determine the impact on safety of operations, initiate proper controls for any hardware nonconformances in accordance with project NCR procedures.

5) Determine root cause of the design deficiency and provide corrective action to preclude recurrence.

6) Issue initial report, interim or final, by 1/3/83.

139455

Bechtel Associates Professional Corporation

139461

SUBJECT: MCAR 79

INTERIM REPORT 1

DATE: January 9, 1984

PROJECT: Midland Plant Units 1 and 2
Consumers Power Company
Bechtel Job 7220

Introduction

This report provides the status and course of corrective action required by Management Corrective Action Report (MCAR) 79.

Description of Deficiency

A condition exists where non-Q/nonseismically supported component cooling water (CCW) piping is connected to Q-listed letdown coolers in the reactor building.

The following lines are involved in this deficiency:

Unit	Line	Line Class	Equipment	Equipment Class	Reference Document (7220-)
1	6"-1HBD-448 through 451	Non-Q	1E-57A&B	Q	H-616, Sh 2
2	6"-2HBD-448 through 451	Non-Q	2E-57A&B	Q	H-617, Sh 4

Historical Background

During a design review and site walkdown, it was discovered that the CCW piping connected to the letdown coolers was not seismically supported and could impose unacceptable loading on the coolers.

Analysis of Safety Implications

Assuming the worst case, the cooler supports could fail, causing subsequent failure of the letdown line, a component of the reactor coolant boundary. Based on this assumption, the condition is reportable under 10 CFR 50.55(e).

Bechtel Associates Professional Corporation

MCAR 79 139455 139461
INTERIM REPORT 1

Probable Cause

The probable cause was failure to ensure compliance with equipment vendor nozzle load limitations at the interface between the non-Q-listed, noncritical, subcontractor (ITT Grinnell)-analyzed piping system and the Q-listed equipment nozzles.

Corrective Action

1. If, as a result of the review, the affected hardware is found to be nonconforming, initiate proper controls in accordance with project procedures for nonconforming items. A nonconformance report is being issued to be attached to the affected coolers.

2. Perform a review to determine if similar conditions exist where non-Q-listed systems are connected to safety-related equipment and table corrective actions as required, based on findings.

3. Action(s) to preclude recurrence will be finalized in a later report.

Reportability

This deficiency was reported to the NRC by Consumers Power Company as a potential violation of 10 CFR 50.55(e) on December 16, 1983.

Submitted by: D S Lewis, for
E.B. Poser
Project Engineering Manager

Approved by: E. H. Smith
BRK.
R.H. Smith
Engineering Manager

Concurrence by: G E Crosby
for M.A. Dietrich
Project Quality Assurance Engineer