



**Consumers
Power
Company**

James W Cook

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January 6, 1984

83-12 #1

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RA	✓	SPRP	
D/RA		DE	
A/RA		DRMSP	
RC		DRMA	
PAO		SCS	✓
SGA		ML	
ENF		File	✓

right 3

MIDLAND ENERGY CENTER PROJECT
DOCKET NOS 50-329 AND 50-330
ITT GRINNELL MECHANICAL SNUBBER ASSEMBLIES
FILE: 0.4.9.84 SERIAL: 26652

On December 9, 1983, Consumers Power Company notified your staff of a potential 10CFR50.55(e) condition involving interference problems associated with ITT Grinnell mechanical snubber assemblies.

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 March 23, 1984.

James W. Cook

JWC/AHB/lr

Attachments: (1) MCAR-1, Report No 76, dated December 13, 1983

(2) MCAR-76, Interim Report 1, dated December 21, 1983.

CC: Document Control Desk, NRC
Washington, DC

RJCook, NRC Resident Inspector
Midland Nuclear Plant

DHood, USNRC Office of NRR

INPO Records Center

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OC0184-0007A-MP01

BECHTEL POWER
CORPORATIONQUALITY ASSURANCE PROGRAM
MANAGEMENT CORRECTIVE ACTION REPORT

MCAR-1

REPORT NO. 76

JOB NO. 7220

Q NO.

DATE 12/13/83

I* DESCRIPTION (Including references):

ITT Grinnell Figure 306/307 mechanical snubber assemblies supplied to the Midland project may experience significant interference problems during plant operation. Specifically, an attachment interference between the ITT Grinnell attachment clamps and their associated Pacific Scientific snubbers may exist on certain assemblies which could restrict lateral pipe movement in either direction and cause binding of the snubber, thereby impairing the safety function of a

(continued)

* RECOMMENDED ACTION (Optional)

1. Prepare a listing of all ITT Grinnell mechanical snubbers produced and delivered to the Midland project prior to October 1978 and between October 1978 and April 1980. This list should include, as a minimum, a cross reference to the P.O. number, the hanger installation/sketch number for which the snubber was used, and the installation/location status of subject assemblies.

(continued)

 REFERRED TO ☒ ENGINEERING ☐ CONSTRUCTION ☐ QA MANAGEMENT ☐ _____
☐ PROCUREMENTISSUED BY GC Crosby 12-13-83
for Project QA Engineer Date

NOTE: This deficiency was reported as a potential
50.55(e) condition to the NRC by the client on 12/9/83.

II REPORTABLE DEFICIENCY

NOTIFIED CLIENT

☐ NO☒ YES

Project Manager

Date

Date

III CAUSE

CORRECTIVE ACTION TAKEN

AUTHORIZED BY _____

Date

STANDARD DISTRIBUTION

ADDITIONAL DISTRIBUTION - AS APPROPRIATE

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

 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.

137078

Description (continued):

given piping system. ITT Grinnell has determined that all mechanical snubbers produced prior to October, 1978 should be reviewed for adequate clearances. In addition, mechanical snubbers produced and shipped by ITT Grinnell between October, 1978 and April, 1980 may exhibit a reduction of the included angle cone of action.

The above conditions, if left uncorrected, could lead to impairment of safety function of the piping system. (Ref: IE Bulletin 83-20; CPCo letter file M-106, serial 23248; DT Perry to EM Hughes, dated 6/14/83.

Recommended Action (continued):

2. Upon completion of Item 1 above, ensure that all suspect snubbers are controlled in accordance with project procedures for nonconforming items.
3. Perform an evaluation to determine impact on safety of operations at Midland.
4. Provide for examination of all identified snubber assemblies (from Item 1 above) and initiate remedial corrective action as required.
5. Determine what verification/inspection by QC is required upon completion of remedial action from Item 3 above.
6. Review and concur with ITT Grinnell's identified root cause of the deficiency and actions to preclude recurrence.
7. Issue interim or final report by December 26, 1983.

Bechtel Associates Professional Corporation

SUBJECT: MCAR 76

ITT Grinnell Figures 306 and 307 Mechanical Snubber Attachment
Interference

INTERIM REPORT 1

DATE: December 21, 1983

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

REFERENCE: ITT Grinnell letter to Bechtel, 11/16/82 (Com 095537)

Introduction

This report addresses ITT Grinnell Figures 306 and 307 mechanical snubbers supplied to the Midland project with potential interference problems. Interference may occur at the pipe clamp and/or between the shock arrestor pivot mount and rear bracket.

Description of Deficiency

ITT Grinnell Figures 306 and 307 mechanical snubbers require an included angle cone of action to the pipe clamp axis to accommodate anticipated piping movements relative to the supporting structure.

Grinnell has informed Bechtel that for Figures 306 and 307 snubbers manufactured before April 1980, the included angle of the cone of action may be less than the design angle.

Summary of Investigation and Historical Background

As discussed in the reference, ITT Grinnell has investigated the subject deficiency and determined the following.

1. All mechanical snubbers produced and shipped by ITT Grinnell before October 1978 should be reviewed to assure sufficient clearance.
2. All mechanical snubbers produced and shipped by ITT Grinnell after April 1980 are acceptable based on design changes incorporated at that time.
3. Mechanical snubbers produced and shipped by ITT Grinnell between October 1978 and April 1980 may exhibit a reduction of the included angle cone of action, particularly:
 - a. All mechanical snubbers that incorporate welded rear brackets;
and
 - b. Size 3 and 35 pipe clamps

Bechtel Associates Professional Corporation

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For the Midland project, future investigation will address the subject deficiency for the Figures 306 and 307 snubbers.

Analysis of Safety Implication

The potential interference(s) could restrict the pipe movement more than the stress analyst intended and analyzed. This could lead to piping stresses beyond Code limits and possible impairment of system safety function.

Probable Cause

Project engineering shall obtain from ITT Grinnell an explanation of the root cause and a plan for corrective action to preclude recurrence of the subject deficiency before the final MCAR report is issued.

Corrective Action

Bechtel field engineering will be requested to initiate a nonconformance report to identify and track this deficiency. All ITT Grinnell Figures 306 and 307 snubbers furnished to the Midland plant will be evaluated. Repair and/or replacement procedures and provisions for verification or inspection will be provided for in the nonconformance report disposition.

Reportability

Based on safety implications, this deficiency was reported to the NRC as potentially reportable in accordance with Title 10 of the Code of Federal Regulations, Part 50.55(e) on December 9, 1983.

138396

Bechtel Associates Professional Corporation

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Manager

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for M.A. Dietrich
Project Quality
Assurance Engineer

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