



**Consumers
Power
Company**

James W Cook

*Vice President - Projects, Engineering
and Construction*

General Offices: 1945 West Parnall Road, Jackson, MI 49201 • (517) 788-0453

April 6, 1984

83-09 #4

Mr J G Keppler, Regional Administrator
US Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, IL 60137

PRINCIPAL STAFF			
RA		DRPP	
D/RA		DE	
A/RA		DRMSP	
RC		DRMA	
PAO		SCS	
PGA		M	
		File	

MIDLAND ENERGY CENTER
DOCKET NOS 50-329 AND 50-330
REVIEW AND CONTROL OF Q LISTED
DRAWINGS AND SPECIFICATIONS
FILE: 0.4.9.81 SERIAL: 28075

References: J W Cook letters to J G Keppler, Same Subject

- 1) Serial 22608, dated November 21, 1983
- 2) Serial 26648, dated January 6, 1984
- 3) Serial 27998, dated February 10, 1984

This letter, as were the referenced letters, is an interim 10CFR50.55(e) report on a deficiency in the system for processing field changes involving project design documents.

The attachment to this letter provides a description of the deficiency and the corrective actions being taken to resolve this problem.

Another report, either interim or final, will be sent on or before June 29, 1984

James W. Cook

JWC/AHB/cd

Attachment: (1) MCAR-73 Interim Report 4, dated March 19, 1984

CC: Document Control Desk, NRC
Washington, DC

DSHood, US NRC
Office of NRR

RJCook, NRC Resident Inspector
Midland Nuclear Plant

INPO Records Center

OC0384-0049A-MP01

8404160173 840406
PDR ADOCK 05000329
S PDR

ADP

9 1984

IE27

11

OM/OL SERVICE LIST

Mr Frank J Kelley
Attorney General of the
State of Michigan
Ms Carole Steinberg
Assistant Attorney General
Environmental Protection Division
720 Law Building
Lansing, MI 48913

Mr Myron M Cherry, Esq
Suite 3700
Three First National Plaza
Chicago, IL 60602

Mr Wendell H Marshall
RFD 10
Midland, MI 48640

Mr Charles Bechhoefer, Esq
Atomic Safety & Licensing
Board Panel
U S Nuclear Regulatory Commission
East-West Towers, Room E-413
Bethesda, MD 20014

Dr Frederick P Cowan
6152 N Verde Trail
Apt B-125
Boca Raton, FL 33433

Mr Fred C Williams
Isham, Lincoln & Beale
1120 Connecticut Ave, NW, Suite 840
Washington, DC 20036

Mr James E Brunner, Esq
Consumers Power Company
212 West Michigan Avenue
Jackson, MI 49201

Atomic Safety & Licensing
Appeal Board
U S Nuclear Regulatory Commission
Washington, DC 20555

Mr C R Stephens (3)
Chief, Docketing & Services
U S Nuclear Regulatory Commission
Office of the Secretary
Washington, DC 20555

Ms Mary Sinclair
5711 Summerset Street
Midland, MI 48640

Mr William D Paton, Esq
Counsel for the NRC Staff
U S Nuclear Regulatory Commission
Washington, DC 20555

Atomic Safety & Licensing
Board Panel
U S Nuclear Regulatory Commission
Washington, DC 20555

Ms Barbara Stamaris
5795 North River Road
Rt 3
Freeland, MI 48623

Dr Jerry Harbour
Atomic Safety & Licensing
Board Panel
U S Nuclear Regulatory Commission
East-West Towers, Room E-454
Bethesda, MD 20014

Mr M I Miller, Esq
Isham, Lincoln & Beale
Three First National Plaza
52nd Floor
Chicago, IL 60602

Mr D F Judd
Babcock & Wilcox
PO Box 1260
Lynchburg, VA 24505

Mr Steve Gadler, Esq
2120 Carter Avenue
St Paul, MN 55108

Mr P Robert Brown
Clark, Klein & Beaumont
1600 First Federal Bldg
Woodward Ave
Detroit, MI 48226

Mr John DeMeester, Esq
Dow Chemical Building
Michigan Division
Midland MI 48640

Ms Lynne Bernabei
Government Accountability Project
1901 Q Street, NW
Washington, DC 20009

3/14/84

145675

SUBJECT: MCAR 73

INTERIM REPORT 4

145538

DATE: March 19, 1984

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

Introduction

This report addresses problems with inconsistent processing and review of Field Change Requests (FCRs)/Field Change Notices (FCNs) against project design documents.

Description of Concern

It was found that in some cases project design change documents (FCRs/FCNs) were not attached to the proper base design documents or reviewed by the appropriate quality organization. (Ref: CPCo Audit MSA-83-32)

Bechtel Field Procedures FPD-1.000, FPD-2.000, and FID-2.100, Project Engineering Procedure 4.62.1 and Administrative Department Procedure and Instruction ADP-2.12 and ADI 2.12.10 describe the process of initiating, reviewing, approving and processing FCRs and FCNs. Although the individual organizations complied with their respective procedures, the operations involved in these procedures were not fully integrated to achieve proper continuity between site and design office activities, thereby resulting in a situation where:

- a) In some cases FCRs and FCNs were not attached to the proper base design documents. (Ref: CPCo Audit MSA-83-32)
- b) In some cases quality organization review of FCRs/FCNs affecting Q-related design documents were not performed where required. (Ref: CPCo Audit MSA-83-32)

Historical Background and Summary of Investigation

It has been identified that design engineering has not consistently reviewed and indicated either approval or disapproval of the entries made by field engineering in the "other drawings or specifications affected" block on the FCR and FCN forms. (The FCR and FCN forms are included as

145675

145538

MCAR 73
Interim Report 4
Page 2

Attachments 1 and 2.) Furthermore, field engineering assumed that if design engineering did not comment on the entries in the "other drawings or specifications affected" block, design engineering concurred with the entries; however, this was not always the case.

Design engineering sometimes referenced related documents in the "remarks" block (which is reserved for design engineering use) on the FCR and FCN forms. The design office Document Control Center (DCC) keyed only on the "remarks" block for entering other related design documents in the FCR/FCN registers. On the other hand, Field Document Control Center (FDCC) personnel keyed on documents listed in the "other drawings and specifications affected" block, rather than the "remarks" block, whether or not the "remarks" block mentioned other documents.

PEP 4.62.1 identified the requirement for quality organization review of FCRs/FCNs to Q-listed specifications. In some cases FCRs/FCNs were written against Q or non-Q documents and then other Q-listed specifications were added to the "other drawings or specifications affected" block or the "remarks" block without obtaining the appropriate quality organization review and approval for the added Q-listed documents.

Analysis of Safety Implication

As described in the corrective action section of this report, all FCRs with at least resident (design) engineering interim approval and all FCNs with at least project field engineering approval have been reviewed to determine the base design documents that they should be posted against. These FCRs and FCNs have also been reviewed to identify those cases where the quality organization review and approval was required but not performed. Appropriate review and approvals have been obtained. The above reviews have included an evaluation as to the possibility of incorrect hardware installation.

While there was a lack of integration between the procedures described previously, no safety concern has been identified at this time. Consumers Power Company (CPCo) has reported this item to the NRC under the rules of 10CFR50.55(e) on October 22, 1983.

Root Cause

The root cause was the lack of integration between field procedures/instructions FPD-1.000, FPD-2.000, and FID-2.100, Project Engineering Procedure (PEP) 4.62.1 and Administrative Department Procedure ADP-2.12 and Administrative Department Instruction ADI 2.12.10, which govern the initiation, review, approval, and processing of FCRs and FCNs.

Corrective Action

1. A program has been established and documented in FCR/FCN Review and Resolution Program (FID-2.400) to: a) identify the proper base design documents which the FCR and FCNs are to be posted against, b) ensure required quality organization review and approvals were obtained, and c) to evaluate whether or not any lack of the above resulted in hardware deficiencies. The program also provides for overview and verification by the Midland Project Quality Assurance Department of these actions. A total of 52,627 FCRs and FCNs have been reviewed under this program. From this review, a total of 10 NCRs (see Attachment 3) have been initiated and are under appropriate review at this time. This review will include evaluation of safety concerns.

Associated with the resolution of the FCR/FCN process, related document control activity problems were identified and were documented via MPQAD MCAR/R DAT-1.

In addition to this program, the Field Procedures, Project Engineering Procedures and Administrative Department Instructions and Procedures associated with FCRs and FCNs have been reviewed and revised as necessary to provide integration. Bechtel personnel have been instructed in the use of these revised procedures in accordance with their departments' respective training procedures.

Actions are now underway to provide that FCRs/FCNs are posted against the proper controlled design documents on the Midland project.

2. A procedure interface program has been established to review the following:
 1. Bechtel project quality related procedures for consistency at points of interface with each other and interfacing Consumers Power Company's procedures.
 2. Problems similar to the FCR/FCN interface problem.

145538

145675

MCAR 73
Interim Report 4
Page 4

This program is currently being implemented and as a result, 30 areas requiring investigation have been identified to date. Appropriate corrective action will be taken based on the results of the investigation.

The review of these 30 areas is scheduled to be completed by August 15, 1984. A final report summarizing the results of this review and any additional areas reviewed is scheduled to be issued by March 15, 1985.

Procedure PPM, Section IV-17, interface control for interorganization process has been drafted and is scheduled to be issued by April 30, 1984. A copy of this procedure will be attached to the next interim report.

Reportability

The conditions described in this report were reported to the NRC by telecon under the rules of 10CFR50.55(e) on October 22, 1983.

WJ/KCH Submitted by: *A. J. Boos*
A. J. Boos
Assistant Project Manager

Approved by:

E. B. Poser *3/15/84*
E. B. Poser
Project Engineering Manager

Approved by:

E. H. Smith
E. H. Smith
Engineering Manager

Concurrence by:

H. A. Dietrich
for H. A. Dietrich
Project Quality Assurance Engineer


Attachments: 1. FCR Form
2. FCN Form
3. NCR List

TJS/h1
120103

145675

~~140234~~

145538

		<h1 style="text-align: center;">FIELD CHANGE REQUEST</h1>				PAGE 1 OF	
						PCR NO.	
JOB NO. 7220	DRAWING OR SPECIFICATION NO.	SHEET NO.	REV SYL.	CITIZEN YES <input type="checkbox"/> NO <input type="checkbox"/>	TITLE OF DWG OR SPEC		
CHANGE PROPOSED PCR <input type="checkbox"/>	PREPARED BY AND DATE	CHANGE APPROVED YES <input type="checkbox"/> NO <input type="checkbox"/>		PFE SIGNATURE AND DATE		DISPOSITION OF PCR REQUIRED BY DATE	
REASON FOR CHANGE							
EXISTING CONDITION							
DESCRIPTION OF CHANGE							
INTERIM APPROVAL BY SIGN _____ RESIDENT ENGINEER: DATE _____				AAO CONTACT: DATE _____ NAME _____			
OTHER DOWNS OR SPEC AFFECTED	CIVIL	ELECTRICAL	INSTRUMENTATION	MECHANICAL	PIPING	WELDING OR OTHERS	
CHECKED BY FIELD LDC							
CHECKED BY PE OR SUPV							
FCR <input type="checkbox"/> APPROVED YES <input type="checkbox"/> NO <input type="checkbox"/>				PROJECT ENGINEER SIGNATURE AND DATE			
REMARKS							

145538

145675

146234



FIELD CHANGE NOTICE

PAGE 1 OF

PCR NO.

JOB NO.

DRAWING OR SPECIFICATION NO.

SHEET NO.

REV SYL.

G ITEM YES NO

TITLE OF DWS OR SPEC

CHANGE PROPOSED

PCR ☐

PREPARED BY AND DATE

CHANGE APPROVED

YES ☐ NO ☐

PFE SIGNATURE AND DATE.

REASON

EXISTING CONDITION

DESCRIPTION OF CHANGE

OTHER DWS OR SPEC AFFECTED	CIVIL	ELECTRICAL	INSTRUMENTATION	MECHANICAL	PIPING	WELDING OR OTHERS
CHECKED BY FIELD LDE						
CHECKED BY PE OR SUPV						

PCR ☐

APPROVED

YES ☐NO ☐

PROJECT ENGINEER SIGNATURE AND DATE

REMARKS

145538

145675

10 NCRs ISSUED

C-00913	H-00113-22
C-00024	H-00134-22
C-00933	H-00135-22
C-00934	H-00175-22
C-00935	H-00176-22

120103