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Power
Company**

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February 10, 1984

83-09 #3

Mr J G Keppler, Regional Administrator
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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: 27998

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

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 attachments to this letter provide 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 April 6, 1984

James W. Cook

JWC/AHB/lr

Attachment: (1) MCAR-73 Interim Report 3, dated January 19, 1984

CC: Document Control Desk, NRC
Washington, DC

RJCook, NRC Resident Inspector
Midland Nuclear Plant

DSHood, US NRC
Office of NER

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PDR ADOCK 05000329
S PDR

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SUBJECT: MCAR 73

INTERIM REPORT 3

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DATE: January 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 Deficiency

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

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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.

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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. To date, each of the 52,627 FCRs and FCNs have been reviewed under this program. From this review, a total of 10 NCRs have been initiated and are under appropriate review at this time. This review will include evaluation of safety concerns.

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. Review Bechtel department procedures (e.g., Administrative Services, Project Engineering, Construction) for consistency at points of interface with each other and Consumers Power Company procedures, and identify and correct any potential problems similar to the FCR/FCN interface problem. A system to maintain this integration shall also be developed.

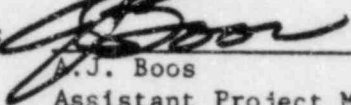
A plan describing steps to accomplish this review together with a schedule for accomplishing the plan has been developed and is under review. Upon approval, the plan will be attached to the next report.

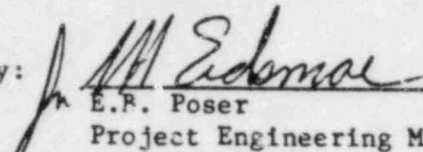
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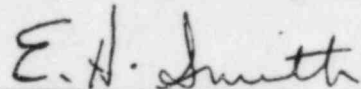
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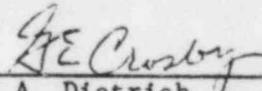
Reportability

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

7/2/84 Submitted by: 
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Assistant Project Manager

Approved by: 
E.R. Poser
Project Engineering Manager

Concurrence by: 
E.H. Smith
Engineering Manager


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


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Attachment 1

		FIELD CHANGE REQUEST					PAGE 1 OF PCR NO.	
JOB NO. 7220	DRAWING OR SPECIFICATION NO.	SHEET NO.	REV SYM.	Q ITEM YES <input type="checkbox"/> NO <input type="checkbox"/>		TITLE OF DWG OR SPEC		
CHANGE PROPOSED PCR <input checked="" type="checkbox"/>	PREPARED BY AND DATE		CHANGE APPROVED YES <input type="checkbox"/> NO <input type="checkbox"/>		PPE SIGNATURE AND DATE		DISPOSITION OF PCR REQUIRED BY DATE	
REASON FOR CHANGE								
EXISTING CONDITION								
DESCRIPTION OF CHANGE								
INTERIM APPROVAL BY RESIDENT ENGINEER: SIGN _____ DATE _____			AAD CONTACT: DATE _____ NAME _____					
OTHER DWGS OR SPECS AFFECTED	CIVIL	ELECTRICAL	INSTRUMENTATION	MECHANICAL	PIPING	WELDING OR OTHERS		
CHECKED BY FIELD LDE								
CHECKED BY PE OR SUPV								
PCR <input type="checkbox"/>	APPROVED		YES <input type="checkbox"/> NO <input type="checkbox"/>		PROJECT ENGINEER SIGNATURE AND DATE			
REMARKS								

 <div style="display: inline-block; vertical-align: middle;"> <div style="border: 1px solid black; border-radius: 50%; padding: 5px; margin-bottom: 5px;">140239</div> <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">140239</div> <div>FIELD CHANGE NOTICE</div> </div> </div>		<div style="border-bottom: 1px solid black; margin-bottom: 5px;">140234</div>		<div style="border-bottom: 1px solid black; margin-bottom: 5px;">PAGE 1 OF</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">PCR NO.</div>		
		<div style="border-bottom: 1px solid black; margin-bottom: 5px;">JOB NO.</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">DRAWING OR SPECIFICATION NO.</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">SHEET NO.</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">REV SYM.</div> <div style="display: flex; justify-content: space-between;"> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">Q ITEMS YES <input type="checkbox"/> NO <input type="checkbox"/></div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">TITLE OF DWG OR SPEC</div> </div>				
CHANGE PROPOSED PCR <input type="checkbox"/>	PREPARED BY AND DATE	CHANGE APPROVED YES <input type="checkbox"/> NO <input type="checkbox"/>	PPE SIGNATURE AND DATE			
REASON						
EXISTING CONDITION						
DESCRIPTION OF CHANGE						
OTHER DWGS OR SPECS AFFECTED	CIVIL	ELECTRICAL	INSTRUMENTATION	MECHANICAL	PIPING	WELDING OR OTHERS
CHECKED BY FIELD LDE						
CHECKED BY PE OR SUPV						
PCR <input type="checkbox"/>		APPROVED YES <input type="checkbox"/> NO <input type="checkbox"/>		PROJECT ENGINEER SIGNATURE AND DATE		
REMARKS						