



**Consumers
Power
Company**

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June 11, 1980

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

MIDLAND PROJECT
DOCKET NO 50-329, 50-330
CONTAINMENT INTERNAL STRUCTURES COATING DEFICIENCY
FILE: 0.4.9.37 UFI: 73*10*01, 00210(S) Serial: 9125

References: S H Howell letters to J G Keppler; Midland Nuclear Plant;
Unit No 1, Docket No 50-329; Unit No 2, Docket No 50-330;
Containment Internal Structures Coating Deficiency;

- 1) Serial Howe-309-79; dated December 13, 1979
- 2) Serial Howe-26-80; dated February 7, 1980
- 3) Serial Howe-75-80; dated April 15, 1980

This letter, as were the referenced letters, is an interim 50.55(e) report on in-containment coatings which have a loss of adhesion between successive layers of the coating system. The attachment to the letter provides the status of the actions being taken to resolve this condition.

Another report, either interim or final, will be sent on or before September 15, 1980.

James W. Cook

WRB/clh

Attachment: MCAR-35, Interim Report #4, "Containment Internal Structures Coating," dated May 30, 1980.

CC: Director of Office of Inspection and Enforcement
Att Mr Victor Stello, USNRC (15)

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

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Summary of Actions to Determine Root Cause

To date, we have not been able to identify the root cause. We believe the answer may be found in further efforts to detect and identify some form of significant contamination on the failed coating.

We also believe the lack of adhesion may be the result of multiple factors that, when acting together, result in a condition which could cause delamination. We are preparing several coating application test panels under multiple adverse conditions in an effort to demonstrate delamination.

The above information will be useful both in the determination of root cause and to place sufficient controls on the application of Coating System 9 to ensure an acceptable finished coating system.

Summary of Corrective Action

We are preparing procedures and testing methods for removal of the failed coating and for surface preparation to receive the reapplication of the coatings. Procedures are to be developed which will utilize information gained from the determination of root cause to ensure the acceptable application and to prevent a recurrence of failed coatings.

Following reapplication of the coating, adhesion tests will be performed to demonstrate acceptability of the coating system.

Before proceeding with the actual work to repair Coating System 9 in containment 2, we will submit the final results of our actions to determine root cause and our corrective action plans for repair of the deficient coatings for your information.

The next report is scheduled for August 30, 1980.

JSC/TJM/ccb

Submitted by:

J. C. Denson

Approved by:

M. Elguly FOR L.H. CURTIS

Concurrence by:

A. D. Bailey 6/3/80

Bechtel Power Corporation

SUBJECT: MCAR 35 (issued 11/13/79)
Containment Internal Structures Coating

INTERIM REPORT 4

DATE: May 30, 1980

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

Introduction

This report updates project engineering's progress in evaluation and action regarding the failure of coatings on concrete, as applied by subcontractor J.L. Manta in the containment building, to maintain adhesion between successive layers of the coating system.

Update of Actions/Taken to Resolve MCAR 35

1. Quantify Extent of Physical Problem

Results of adhesion testing indicate a random failure pattern on walls in containment 2 coated with Coating System 9, with some walls affected more extensively than others. Approximately 17.7% of the tests demonstrate insufficient adhesion.

2. Document Review

Application documents have been reviewed and daily data has been plotted for coating variables. We have not been able to identify any significant correlation between the plotted variables and the data from Item 1 above.

3. Material Analysis

Material analysis to date has not yielded any significant data to indicate the cause of the adhesion failure. We will be performing additional tests in an effort to detect and identify some form of contamination which could affect the coating adhesion.

4. Coating Acceptance Procedure

The coating acceptance procedure will include the performance of adhesion tests to demonstrate the acceptability of the finished repaired coating.