Stephen H. Howell
Vice President

General Offices: 212 West Michigan Avenue, Jackson, Michigan 49201

April 19, 1978
Howe-58-78

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

MIDLAND NUCLEAR PLANT -
UNIT NO. 1, DOCKET NO. 50-329
UNIT NO. 2, DOCKET NO. 50-330
CONTAINMENT BUILDING PERSONNEL AIR LOCKS

In accordance with the requirements of 10 CFR 50.55(e), this letter constitutes an interim report of the status of the containment building personnel locks which have nine defective vendor welds (four in the Unit 1 lock and five in the Unit 2 lock) used to attach stiffeners to the personnel lock structure.

The attachment to this letter supplements the information in the previous interim report.

Another report, either interim or final, will be sent on or before May 26, 1978.

Stephen H. Howell

Attachment: Interim Report #2 for MCAR-20, dated March 31, 1978, "Cracked Weld Between Stiffener and Welding Ring of Personnel Lock"

CC: Dr Ernst Volgenau, USNRC (15)

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

APR 21 1978

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SUBJECT: MCAR #20 (Issued February 1, 1978)
Cracked weld between stiffener and welding ring of personnel lock

INTERIM REPORT #2

DATE: March 31, 1978

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

Introduction

This report is submitted to advise of the interim status and course of action required pursuant to MCAR #20 and NCR 1185. An interim report was prepared on this subject on February 17, 1978.

The final report was scheduled to be completed by March 31, 1978, but the problem of post-weld heat treatment requirements in the repair procedure proposed by W.J. Woolley and Co has not yet been resolved. The final report is rescheduled for May 1, 1978, for resolution of this problem.

Deficiency

The deficiency was discussed in the previous report.

Safety Implications

As stated in BLC-5623, W.J. Woolley & Co, the designer of the subject locks, has advised Bechtel that the structural integrity of the inner bulkhead against imposed loading cannot be guaranteed in its present state. Under normal reactor operation, both doors of the personnel lock are closed. However, the door may be open for normal entry and exit to and from the containment or when the lock is being tested to verify that only one door in each lock can be operated at a time. Hence, for a limited time, the inner door may act as a primary pressure boundary. However, the deficiency is not latent in nature and would have been detected during the structural integrity test when the inner door was closed.

Corrective Action

It is assumed that the fillet welds failed because of improper joint fit-up. The excessive gap reduced the effective fillet weld leg which failed when stressed upon field welding. Pro Fab, the fabricator of the

subject locks, did not have a "fillet" welding procedure. The matter is under investigation for proper resolution.

A repair procedure for the cracked fillet welds was received from W. J. Woolley Co. on March 24, 1978. It has been reviewed by Bechtel and found acceptable. However, implementation of the post-weld heat treatment (PWHT) requirements may be impractical and an alternate design approach requiring no PWHT is being discussed with the W. J. Woolley Co. If found acceptable, W. J. Woolley Co. would incorporate the proposed modification into its design and repair procedure.

Submitted by: J. Arora

Approved by: GAT. R.L.C/ L. R. Basinski

Concurrence by: Karl Wiedner

Consumers
Power
Company

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April 19, 1978
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MIDLAND NUCLEAR PLANT -
UNIT NO. 1, DOCKET NO. 50-329
UNIT NO. 2, DOCKET NO. 50-330
REACTOR BUILDING SPRAY PIPING SUPPORTS

In accordance with the requirements of 10 CFR 50.55(e), this letter constitutes an interim report on the status of the reactor building spray piping supports which potentially exceed ASME Section III Code allowable stresses.

A description of the discrepancy, potential safety implications, investigation and planned corrective actions are documented in the attachments to this letter.

Another report, either interim or final, will be sent on or before June 16, 1978.

Attachment: 1. Quality Assurance Program, Management Corrective Action Report, MCAR-1, Report 22.
2. Letter, P.A.Martinez to G.S.Keeley, BLC 5804, MCAR-22, Interim Report #1, with attached report.

CC: Dr Ernst Volgenau, USNRC (15)
Director of Office of Management
Information and Program Control, USNRC (1)

APR 21 1978