UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

OCT 13 1983

MEMORANDUM FOR: Region III Files

FROM: F. C. Hawkins, Reactor Inspector, Division of Engineering

SUBJECT: MIDLAND HVAC ALLEGATIONS (INDIVIDUAL CC)

On September 26, 1983, a GAP representative verbally informed me that a former Bechtel employee at the Midland site had concerns regarding Bechtel's interface in the design and construction of the Midland HVAC system. GAP representatives later referred me to Mrs. B. Stamiris; stating that she personally knew the individual and could possibly persuade him to come forth with his concerns. During the ensuing conversations, Mrs. Stamiris stated that the individual would speak to the NRC with the following conditions: (1) no signed statement of any type would be provided, (2) confidentiality was to be strictly maintained, (3) the concerns were not to be treated as formal allegations and (4) information provided by the individual, of technical substance, was to be incorporated into the NRC's ongoing HVAC inspection effort at Midland.

Subsequently, on October 5, 1983, NRR representatives (D. Hood, D. Terao, W. LeFave) and I met with the individual to discuss his specific concerns. The issues raised by the individual concerned (1) the improper use of onsite design change methods, (2) incorrect installation of surface mounted plates, (3) an extensive proposed Control Room HVAC redesign, (4) excessive blowholes in the Control Room ductwork and (5) Bechtel's use of nondisclosure statements.

The individual recounted examples of each concern and referred names of fellow workers to us who could corroborate his statements and provide the necessary details. I interviewed those individuals at the site on October 6, 1983. None of the individuals interviewed could confirm the validity of Concern No.'s (2) or (4); therefore, no further action is planned for these two items.

The results of the interviews and the proposed NRC action to address each item of concern was discussed with Mrs. Stamiris on October 12, 1983. During that conversation, I again requested that she ask Individual CC to provide a copy of the nondisclosure statement referred to in Concern No. (5).

Sent to TERA on 10/14/83

She concurred with the proposed actions and stated that she would actively pursue obtaining a copy of the disclosure statement. Pending receipt of the statement, no further action on our part is planned with regard to Concern No. (5).

Per the agreement with Mrs. Stamiris and Individual CC, the results of our inspection of Concern No.s (1) and (3) will not be specifically documented and any actions taken by Region III will be accomplished as part of the ongoing special technical inspection documented in Reports No. 50-329/83-08; 50-330/83-08.

F. C. Hawkins
Reactor Inspector

cc: G. Roy
J. Harrison
W. Key
R. Gardner
W. Little
L. Spessard
E. Pawlik

Bechtel Associates Professional Corporation

12199 777 East Eisenhower Parkway
Ann Arbor, Michigan
Mail Address P.O. Box 1000, Ann Arbor, Michigan 48106

Route: DTP
B944.1 & MTG NOTES

July 14, 1983

cc: DTP
TMP
RMA
CHRON

BLC- 17400

Consumers Power Company
1945 West Parnall Road
Jackson, Michigan 49201

Attention: Mr. D.T. Perry
Project Engineering Manager,
Mechanical and Civil

Subject: Midland Plant Units 1 and 2
Consumers Power Company
Bechtel Job 7220
MEETING NOTES NO. 1884

Meeting Notes No. 1884 regarding the main control room HVAC system cooling capacity are attached. Bechtel recommends that Option 1B be pursued to resolve the cooling capacity problem in the main control room.

If you have any questions, please contact T.G. Ballweg at (313) 994-7611.

Very truly yours,

E.M. Hughes
Project Engineer

TGB/PL/1b(M)
060605/2

Attachment: Meeting Notes No. 1884

cc: (all w/a)

F.W. Buckman
D.B. Miller
J.A. Mooney

RECEIVED
DOCUMENT CONTROL
MIDLAND PROJECT

JUL 18 1983
MIDLAND PROJECT
MANAGEMENT

Written Response Requested: No

8307280254

Bechtel Associates Professional Corporation

121998

777 East Eisenhower Parkway
Ann Arbor, Michigan

Mail Address P.O. Box 1000, Ann Arbor, Michigan 48106

MEETING NOTES NO. 1884

MIDLAND PLANT UNITS 1 AND 2

CONSUMERS POWER COMPANY

BECHTEL JOB 7220

DATE: June 2, 1983

PLACE: Midland Jobsite-Outage Building

SUBJECT: Main Control Room HVAC System Cooling Capacity

ATTENDEES:

Bechtel	Consumers
R. Amin, Project Engineering	R.J. Boulton
T.G. Ballweg, Project Engineering	T. Postlewait
S. Braslavsky, Project Engineering	R. Rice
S. Greissman, Resident Engineering	
P. Leader, Project Engineering	
D.F. Lewis, Project Engineering	
T. Maier, Subcontracts	
T. Supplee, Resident Engineering	

PURPOSE: To define the problem with the main control room heating, ventilating, and conditioning (HVAC) system cooling capacity, explain the background, explore options for resolution, and discuss the construction/schedule impact and licensing exposures of each of the options.

PRINCIPAL AGREEMENTS:

1. The problem was defined and background information was presented to explain how and why the main control room cooling load has increased approximately 50 percent since the HVAC equipment was purchased.

2. Four options (1, 1B, 2, and 3, see attached views) were discussed which range from:

   Option 1: Increasing control room HVAC system cooling capacity by increasing chilled water flow through the existing HVAC equipment and revising design basis and final safety analysis report (FSAR) commitments to be consistent with the expected higher control room and engineered safety features (ESF) equipment room temperatures with only one HVAC system train operating.

Option 1B: Same as Option 1, except this allows the option for operation of both control room HVAC system trains in parallel during normal plant operation but only one train following a design basis accident. [Writer's Note: Subsequent to the discussion, evaluation of main control room (MCR) A/H fan curves indicates this mode of operation may be unstable. New fans may be required to make this option viable. This concern was discussed in the management meeting on June 9, 1983, in addition to a follow-up discussion between T. Ballweg (Bechtel) and T. Postlewait (Consumers) on June 7, 1983.]

Option 2: Same as Option 1, except modify the return air ductwork system by installing a plenum enclosure behind the main walk through control panels to improve air distribution and lower the expected room temperatures in the normally occupied areas of the complex.

Option 3: Maintain present design basis and FSAR commitments by:

a. Installing new ESF chillers for the main control room

b. Installing new control room air handling units

c. Ductwork modifications necessary due to increased air flow rates

d. Potential diesel fuel oil storage tank capacity modifications

e. Service water cooling system modifications

3. The expected control room and ESF equipment room temperatures during normal plant operation and postaccident for each of the four options were discussed with emphasis on the percentage of the time these temperatures could be expected. It was noted that except for Option 3, there are no safety factors for unknown heat loads in the main control room, nor any allowance for future additions to MCR.

4. The expected construction/schedule impact and licensing exposure for each of the four options was discussed. Issues mentioned were the potential of reopening the NRC Safety Evaluation Report, human factors considerations, and impact on main control room during preoperation startup testing.

5. Bechtel recommended that Option 1B be pursued to resolve the cooling capacity problem with the main control room HVAC system.

ACTION ITEMS:

Consumers Power Company is to determine which option(s) should be developed further and will advise Bechtel by June 13, 1983.

Prepared by: P. Leader
P. Leader
Mechanical Engineer

Reviewed by:
A.A. Amin
Mechanical Group Leader

Approved by: Suresh S. Patel for
T.G. Ballweg
Mechanical Group Supervisor

TGB/FL/lb(M)
060606/2