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

February 13, 1981

MEMORANDUM FOR: R. C. Knop, Section Chief

FROM: R. J. Cook, Senior Resident Inspector, Midland Site

SUBJECT: NEED FOR INCREASED INSPECTION EFFORT, ELECTRICAL AREA

During the past week, I have received information which may indicate a need for a rigorous NRC Inspection into the installation of electrical equipment, wire ways and cable at the Midland Site.

Some of the areas which appear to be in question are:

1) Separation criteria, as defined in the FSAR and IEEE Standards being violated. Construction Specifications are being considered "guides" in selected areas.

2) Zinc based paint being applied to conduit joints and hangers located in the containment which is not approved for use in the containment and/or no inventory of the amount of "unauthorized" paint being used.

3) Drilling into safety related walls for "temporary electrical attachments" (Q or Non-Q) without engineering approval to drill.

4) Void stamps being capriciously applied to electrical Deviation Reports in what appears to be an expediant way of dispositioning the Deviation Report.

5) New hire electrical QC personnel not being qualified and/or experienced and performing QC functions.

6) Audit findings pertaining to inplace storage of instruments being diluted and not being given strong management corrective action.

The above listed symptoms are considered indicative of additional questionable practices pertaining to the installation of electrical equipments. Therefore, an extensive rigorous inspection of electrical installation

appears appropriate - particularly when considering that electrical construction activity is increasing at Midland.

Please advise.

R. J. Cook

R. J. Cook
Senior Resident Inspector
Midland Site

Consumers Power Company

James W Cook
Vice President - Projects, Engineering and Construction

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

February 13, 1981

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 PROJECT - DOCKET NOS 50-329, 50-330
ASSIGNMENT OF NRC CONTROL NUMBERS
TO 50.55(e) REPORTS FILE: 0.4.9 UFI: 73*10*01 SERIAL: 11192

Reference: (1) J G Keppler letter to J W Cook, dated January 22, 1981

In response to your request (Reference 1), we have given NRC Assigned Numbers to all Consumers Power 50.55(e) reports, beginning with our very first report made in 1973 to our most recent report made January 22, 1981. A listing of all our 50.55(e) reports and their corresponding numbers is provided in Attachment 1 to this letter. We will begin showing these NRC Assigned Numbers in the upper right hand corner of all future 50.55(e) correspondence.

James W. Cook

WRB/lr

CC: Director, Office of Inspection & Enforcement
US Nuclear Regulatory Commission
Att Mr Victor Stello (15)

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

RJCook, USNRC Resident Inspector
Midland Nuclear Plant (1)

~~8102180499~~

CC: CBechhoefer, ASLB Panel
CALinenberger, ASLB Panel
FPCowan, ASLB Panel
AS&L Appeal Panel
MMCherry, Esq
MSinclair
CRStepehns, USNRC
WDPaton, Esq, USNRC
FJKelly, Esq, Attorney General
SHFreeman, Esq, ASst Attorney General
GTTaylor, Esq, Asst Attorney General
WHMarshall
GJMerritt, Esq, TNK&J
Great Lakes QA Managers

LOG 50.55(e) ITEMS

NRC ASSIGNED NO.	FILE NO.	DESCRIPTION	MCAR NO. IF APP.	DATE REPORTED	DATE NEXT CPCO REPORT DUE	DATE CPCO FINAL REPORT	DATE CPCO CLOSE OUT	DATE & LETTER NRC CLOSEOUT
73-01	0.4.9.2	B&W Weld Filler Certification		01/16/73		02/12/73		08/22/79 (2) IE Report 79-15, Pg 4
73-02	0.4.9.3	Cadwelds		11/09/73		12/10/73		(2) NRC Ltr of 12/26/73
73-03	0.4.9.4	B&W Prototype Testing		12/28/73		03/01/74		01/04/80 (2) IE Report 79-25, Pg 5
74-01	0.4.9.5	Containment Fire		11/21/74		01/21/75		(3) NRC Ltr of 02/06/75
74-02	0.4.9.6	Containment Rebar Spacing		12/05/74		04/23/75		(3) NRC Ltr of 05/07/75
76-01	0.4.9.7	Missing Rebar		04/13/76		05/21/76		
76-02	0.4.9.8	B&W Surveillance Capsule Holder		04/13/76		05/27/77		06/21/77 NRC Ltr of 06/21/75 (4)
76-03	0.4.9.9	Component Cooling Water Pump Casing	13	12/10/76		05/27/77		The order for this component was cancelled.
77-01	0.4.9.10	Liner Plate Bulge	16	02/28/77		08/15/78	12/78 (1)	

(1) Includes any modifications of installation after design release.
(2) Letter of R H Engelhen (NRC) to J F Mallaj (B&W) of April 24, 1973 accepts the steam generators for service.
(3) Letter of J G Davis (NRC) to S H Howell acknowledges report and states "should we require additional information..., we will contact you.
(4) Letter of R F Heishman (NRC) to S H Howell "...this closes our control No. F31289F3, previously H01289F3.

LOG 50.55(e) ITEMS

NRC ASSIGNED NO.	FILE NO.	DESCRIPTION	MCAR NO. IF APP.	DATE REPORTED	DATE NEXT CPCO REPORT DUE	DATE CPCO FINAL REPORT	DATE CPCO CLOSE OUT	DATE & LETTER NRC CLOSEOUT
77-02	0.4.9.11	Tendon Sheath	17	04/19/77		08/12/77	10/78 (1)	IE Report 79-15 Pg 4
78-10	0.4.9.22	Qualification Test Review	25	11/13/78	03/27/81			
78-11	0.4.9.23	Pressurizer Heater System		12/07/78	04/01/81			
78-12	0.4.9.24	Penetrations, Termination Defects	26	12/22/78		05/25/79	06/08/79 (1)	
78-13	0.4.9.25	Control Room Air Filter System Inadequate Wiring	27	12/27/78		03/09/79	01/80	
79-02	0.4.9.27	Feedwater System Pipe Spool - Impact Properties	29	05/22/79		12/10/79		
79-01	0.4.9.26	Main Control Status Display Panels (Soldered Connections)	28	05/29/79		07/20/79		
79-07	0.4.9.32	Containment Air Coolers, Cooling Water, Supply Pressure	30	07/09/79		10/15/79		
79-03	0.4.9.28	Small Break/RC Pump Operation Interaction	NA	07/16/79	05/30/81			
79-04	0.4.9.29	States Sliding Links, Defective Clip Presents Cinching	32	07/19/79		03/03/80		
79-05	0.4.9.30	Tendon Wire Length Variation	33	07/27/79		10/31/79		02/16/80 Closed in I&E Report 80-01 Page 16/17
77-03	0.4.9.12	ITT Grinnell Pipe Supports	NA	10/27/77		09/08/78		
78-01	0.4.9.13	RCP Motor Flange	NA	01/18/78		01/31/79		
78-03	0.4.9.15	Personnel Air Locks	20	02/02/78		09/29/78		

LOG 50.55(e) ITEMS

NRC ASSIGNED NO.	FILE NO.	DESCRIPTION	MCAR NO. IF APP.	DATE REPORTED	DATE NEXT CPCO REPORT DUE	DATE CPCO FINAL REPORT	DATE CPCO CLOSE OUT	DATE & LETTER NRC CLOSEOUT
78-02	0.4.9.14	Decay Heat Removal Pumps	NA	02/02/78		06/02/78	08/78	12/28/78 NRC Report 78-15
78-04	0.4.9.16	RPS Loss of Ground	NA	03/08/78		01/11/80		
78-05	0.4.9.17	Spray Piping Supports	22	03/22/78		12/21/79		
78-06	0.4.9.18	Small Break Analysis	NA	04/12/78		03/12/79		
78-07	0.4.9.19	Seismic Cable Tray Supports	23	04/14/78		09/08/78		
78-08	0.4.9.20	Diesel Generator Building Foundation		09/07/78		02/07/80		Transferred to Licensing to follow.
78-09	0.4.9.21	Battery Racks	NA	10/20/78		01/31/79		
79-06	0.4.9.31	Station Batteries	NA	08/01/79		08/23/79		
79-08	0.4.9.33	Hilti Drop-in Anchors	NA	08/31/79		12/21/79		
79-10	0.4.9.35	RV Anchor Bolt Failure	37	08/31/79	3/31/81			
79-11	0.4.9.36	Boration System Inadequacies	NA	10/02/79	7/17/81			
79-12	0.4.9.37	Unit 2 Shield Wall Coatings	35	11/13/79	3/1/81			
80-01	0.4.9.38	Letdown Cooler Supports	NA	02/26/80	4/15/81			
79-09	0.4.9.34	Gould Part 21	NA	09/21/79		10/15/79		
80-02	0.4.9.39	B&W/Bechtel Inconsistencies on Cross-Referencing for B&W Supplied Items	38	05/02/80		10/31/80		
80-03	0.4.9.40	ECC Actuation System Cross-over	39	06/18/80		07/17/80		

LOG 50.55(e) ITEMS

NRC ASSIGNED NO.	FILE NO.	DESCRIPTION	MCAR NO. IF APP.	DATE REPORTED	DATE NEXT CPCO REPORT DUE	DATE CPCO FINAL REPORT	DATE CPCO CLOSE OUT	DATE & LETTER NRC CLOSEOUT
80-04	0.4.9.41	HELBA Restraint Design	40	8/21/80	4/3/81			
80-05	0.4.9.42	Sway Strut Rod Ends Deficiency	42	9/24/80	2/27/81			
80-06	0.4.9.43	Component Cooling Water Desig	43	10/8/80	3/31/81			
80-07	0.4.9.44	Reactor Coolant Loop Analysis	44	11/17/80	3/12/81			
80-08	0.4.9.45	ECCAS Cabinets		11/18/80	2/27/81			
80-09	0.4.9.46	Low Alloy, Quenched & Tempered Bolting 7/8" Dia and Greater	45	11/26/80	3/31/81			
81-01	0.4.9.47	Limitorque Operator - Terminal Strip Voltage Rating	46	1/14/81	2/13/81			
81-02	0.4.9.48	Seismic Model of Auxiliary Building	47	1/21/81	2/20/81			
81-03	0.4.9.49	Borated Water Storage Tank Foundation	48	1/22/81	2/21/81			

J D Selby
Chairman of the Board and President

General Offices: 212 West Michigan Avenue, Jackson, Michigan 49201 • (517) 788-1600

May 8, 1981

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
US Nuclear Regulatory Commission
Washington, DC 20555

MIDLAND PROJECT
PROJECTED LICENSING SCHEDULE
FILE: 0505.2 UFI: 70*01 SERIAL: 12176

Dear Mr. Denton:

On January 16, 1981, I wrote a letter to John Ahearne, then Chairman of the NRC, expressing my concern with regard to NRC's projected licensing schedule for the Midland Plant as given in NRC's November 21, 1980 Status Report to Congress. Your response of February 10, 1981 stated that a reexamination of facilities such as Midland with construction completion dates beyond CY 1982 was in progress. In addition, you indicated that upon completion of the re-examination you would provide me with the results and a description of the effect on Midland 2.

Recently we received a copy of NRC's March 31, 1981 Status Report to Congress. Table 2 of that report, while indicating an NRC decision date of 7/83, in agreement with our current Midland 2 fuel load date, retains the NRC's previously scheduled SER date of 7/82. Thus, the post-SER licensing duration has been further shortened and this duration of one year has been applied to all units scheduled for completion during CY 1983.

I continue to believe that the NRC's scheduled SER issue date for Midland is unrealistic and places undue pressure on the post-SER licensing process. In particular an ACRS (SER-SSER) duration of only one month is not reasonable for Midland. Likewise, experience in the past with heavily contested hearings on Midland indicates the need for a longer than average hearing duration.

As stated in my March 2, 1981 response to your letter of February 10, 1981, I support the establishment of realistic schedules and proper prioritization for all plants. Thus, I am pleased to note in the March 31 Status Report that the Staff is attempting to reconcile the discrepancies between NRC and applicant construction completion dates. In this regard, recent Midland construction progress is demonstrating the required installation rates to achieve our over-all construction schedule. In fact, during the past five weeks ending April 26, the project installed 738,000 ft of wire and also exceeded scheduled

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quantities of other critical commodities such as conduit, small pipe and small pipe hangers. We are confident that there is a sufficient engineering backlog to sustain the required installation rates. We also believe, subject to Staff review, that our design is based on a realistic scope that properly incorporates the post-TMI issues. We feel that our current progress is indicative that our planned Unit 2 fuel load date of July 1983 is attainable.

I am also encouraged by an increased amount of licensing review activity by the Staff on the Midland docket, particularly the Staff participation in the Design Review Board meeting on Cold Shutdown and a subsequent Auxiliary Feedwater technical review meeting in late April. The critical nature of the Midland licensing schedule dictates the need for additional similar meetings as well as other alternative review techniques, as appropriate; and I request your continued positive response to our initiatives in this regard.

Nevertheless, I believe that the Midland licensing schedule presented in Table 2 of NRC's March 31, 1981 Status Report to Congress represents an unacceptable risk to Consumers Power, its customers, and its stockholders in terms of the likelihood of our obtaining a license to load fuel in Unit 2 upon completion in July 1983. NRC Chairman Hendrie stated on P. 4 of that report that the Table 2 "schedules are based on completing the licensing process prior to the applicant's estimated construction completion date." I request that you reassess the realism of the NRC's current licensing schedule for Midland and, specifically, that you consider advancing the schedule for issuance of the Midland SER by six months to January of 1982. My staff at Consumers Power is available to support the NRC staff in any way you consider appropriate to attain this more realistic licensing schedule.

Yours very truly,

J. D. Selby

JDS:im

ROUTING AND TRANSMITTAL SLIP

Date: 6-2-81

TO: (Name, office symbol, room number, building, Agency/Post)	Initials	Date
1.		
2. Ron Cook		
3.		
4.		
5.		

	Action		File		Note and Return
	Approval		For Clearance		Per Conversation
	As Requested		For Correction		Prepare Reply
	Circulate		For Your Information		See Me
	Comment		Investigate		Signature
	Coordination		Justify		

REMARKS

I have attached a copy of the package we discussed yesterday by phone. After you have a chance to read it perhaps we can discuss it again.

CEJ

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post)	Room No.—Bldg.
Cecil Jones	Phone No.

5041-102

OPTIONAL FORM 41 (Rev. 7-76)
Prescribed by GSA
FPMR (41 CFR) 101-11.206

☆U.S. GPO: 1978—261-647/2310

The following is a "retype" of a letter from Barbara Stamiris to James G. Keppler, RIII. Retyping was necessary for Telefax transmission due to light copy.

May 26, 1981

Dear Mr. Keppler,

I want to thank you again for meeting with me last Thursday in Midland. Your directness and openness encourage me to communicate with you once more.

I am including my recent motions which we briefly discussed. I am also including some 1980 audit reports as it is my understanding from Consumers and some NRC personnel that they may not have been presented to the NRC.

I also wish to have this final input into your upcoming QA decision. You considered Consumers QA acceptable in 1979 because they identify their own deficiencies. Although I consider such identification a basic obligation, even this is questionable in 1980 considering 1) their denial of a QA breakdown in soils in their Answer to Notice of Hearing, 2) their handling of the Zack matter, and 3) Bechtel's withholding of information related to the Pipe Whip Restraint problem (which dates back to I&E report 78-10).

Even more important than the identification of problems, is the resolution of problems once identified. It is apparant in almost every major problem area Consumers has encountered over the years, that the weeding out of problem sources, and ultimate resolution of the problems has not occurred in a timely manner, on their own initiative, as you are well aware.

Perhaps the best example of this is Consumers acceptance of poor quality performance by Bechtel, which has been the underlying cause of so many problems. Even when the problem has been identified, as in their 1975 lawsuit against Bechtel for negligence in construction and design of Palisades, or as in their response to 50-54f q.23 as to root causes of the soil settlement problem, these Bechtel deficiencies are condoned and destined to repeat themselves.

Your Nov. 24, 1980 SALP report and the post SALP assessment of their QA reform certainly indicated need for improvement. And although I am not in a position to obtain hard information about this most recent period of QA performance, I understand that Mary Sinclair has a tape in which workers discuss their reluctance to report QA matters, which may confirm what has heretofore been only hearsay.

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Most recently, I read in today's paper that Consumers disagrees with the NRC on the necessity of halting work on the small bore pipes while audit reports on the problem are completed. Once again they seek to proceed at their own risk, without examining the full extent or root cause of the problem. To me, this says more about Consumers managerial attitude concerning QA problems, and how it remains the same, than any statements of intent or impressive improvements as demonstrated in the inspection last week.

I do not criticize the inspection itself as it took place last week. But I am terribly concerned with what I understand the NRC intends to do with that report in terms of ignoring five years of past QA deficiencies because of it. At the Nov. 24, 1980 SALP meeting, you said that you intended to lay out the broad overview of Consumers QA performance as you did at that meeting, and let the Board decide "is their QA still defensible?" Do you now intend to present a conclusion instead?

I have no choice but to raise these questions and concerns, for I am deeply distressed with what I see developing and being finalized so quickly. My concern goes beyond the effect of this pending stipulation on my case or contentions, to its profound implications for basic health and safety questions, in the rest of the proceeding and for NRC regulation as a whole.

Sincerely,

Barbara Stamiris

initiative, as you are well aware.

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intends to do with this report in

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

JUN 9 1981

Docket Nos: 50-329/330

Mr. J. D. Selby, President & Chief
Executive Officer
Consumers Power Company
212 West Michigan Avenue
Jackson, Michigan 49201

Dear Mr. Selby:

We presently have under review almost thirty applications for operating licenses. For your application, as well as most others, we are committing resources to assure that staff reviews are completed on a schedule consistent with your projected plant completion date. Preliminary schedules for facilities projecting plant completion in late 1982 or in 1983 were provided to Congress on April 30, 1981 in connection with the "Bevill Report." Your schedule was developed using your estimated construction completion date and a set of standard hearing assumptions.

The preliminary hearing schedules assume a standard eleven-month time period from the issuance of the final Supplement to the Safety Evaluation Report (SSER) to the NRC decision date. This time period incorporates the efficiency measures projected to be in place in the near future. It is based on five months from issuance of the SSER to the start of hearing, five months from start of hearing to the initial decision by the Atomic Safety Licensing Board, and one month from the initial decision to the Commission's decision date. These assumptions, and your relative priority, will be re-examined on a case-by-case basis after the Commission completes its consideration of proposed changes to the regulations.

To assure proper internal resources allocation, it is important that you provide us a realistic and up-to-date projected construction completion date. Because of manpower limitations each review will be scheduled to fall in a "window" of time wherein our reviews must be completed. An unexpected change of your completion date or your ability to provide needed information in accordance with this schedule will likely have an impact on the schedule for your review. Accordingly, you should examine your schedules in the attached Table and confirm or change your construction completion date within 14 days of receipt of this letter.

You should also provide quarterly updates thereafter until issuance of the Safety Evaluation Report for the facility.

~~8106110553~~

JUN 9 1981

For the staff to meet these schedules, all information concerning your application identified as needed must be provided by you or your contractors at least eight weeks prior to the date scheduled for the issuance of the Safety Evaluation Report. You should consider arranging to have members of your staff who can represent you and who can resolve any last minute open items, in residence near the NRC offices in Bethesda for a two week period starting six weeks immediately preceding the scheduled date for issuing the Safety Evaluation Report. Your staff should contact the Licensing Project Manager for specific needs related to the review of your application.

Your cooperation is appreciated.

Sincerely,

Original signed by
R. R. Denton

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

cc: See next page

MIDLAND

Mr. J. D. Selby, President & Chief
Executive Officer
Consumers Power Company
1945 West Parnall Road
Jackson, Michigan 49201

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Lansing, Michigan 48909

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U.S. Nuclear Regulatory Commission
Resident Inspectors Office
Route 7
Midland, Michigan 48640

Ms. Barbara Stamiris
5795 N. River
Freeland, Michigan 48623

Mr. J. W. Cook
Vice President
Consumers Power Company
212 West Michigan Avenue
Jackson, Michigan 49201

TABLE 2

CY 1983 PLANTS

DIVISION OF LICENSING - 4/ 6/81

Plant	Estimated Delay (Months)	Issue DES	Issue SER	ACRS MTG	ISSUE FES	Issue SSER	Start of Hearing(1)	ASLB Initial Decision(1)	NRC Decision Date(1)	Applicant Construction Completion
Calaway 1/2	0	09/81	10/81	11/81	01/82	11/81	04/82	09/82	10/82	10/82
St. Lucie 2	0	09/81	10/81	11/81	01/82	11/81	04/82	09/82	10/82	10/82
Palo Verde 1/2/3	0	10/81	11/81	12/81	02/82	12/81	05/82	10/82	11/82	11/82
**Seabrook 1/2*	0	11/81	01/82	02/82	03/82	02/82	07/82	12/82	01/83	01/83
Clinton 1	0	11/81	01/82	02/82	03/82	02/82	07/82	12/82	01/83	01/83
Wolf Creek 1	0	01/82	04/82	05/82	06/82	05/82	10/82	03/83	04/83	04/83
Byron 1/2	0	01/82	04/82	05/82	06/82	05/82	10/82	03/83	04/83	04/83
Perry 1/2	0	02/82	05/82	06/82	07/82	06/82	11/82	04/83	05/83	05/83
Midland 1/2	0	04/82	07/82	08/82	09/82	08/82	01/83	06/83	07/83	07/83
**Catawba 1/2	0	05/82	08/82	09/82	10/82	09/82	02/83	07/83	08/83	08/83
**So. Texas 1/2	0	06/82	09/82	10/82	11/82	10/82	03/83	08/83	09/83	09/83
River Bend 1/2	0	07/82	10/82	11/82	12/82	11/82	04/83	09/83	10/83	10/83

NOTES:

* FSAR not tendered
** Schedules subject to change upon resolution of NRC and applicant construction completion differences

(1) Based on a standard eleven-month assumption from issuance of SSER to NRC Decision Date

Bechtel Associates Professional Corporation

777 East Eisenhower Parkway
Ann Arbor, Michigan

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

June 29, 1981

To Whom It May Concern:

Enclosed you will find a revision to your set(s) of the Midland Plant Reference Drawings.

Please incorporate into your set(s) as appropriate, and if you have any questions, feel free to call L. Hultquist or D. Allred at (313)994-7861.

Thank you,

MIDLAND PLANT REFERENCE DRAWINGS INDEX

PLANT ARRANGEMENT

Bechtel Dwg No.	Rev.	Title	FSAR Fig. No.
A-62	7	Access Control - El. 632'-6" and 634'-6"	12.5-1
A-123	6	Fire Protection - Reactor and Auxiliary Building Plan at El. 614'-0"	9A-7
A-126	6	Fire Protection - Reactor and Auxiliary Building Plan at El. 659'-0"	9A-10
A-150	4	Minimum Radiation Shielding Requirements, Reactor and Auxiliary Building, Plan of El. 568'-0"	12.3-1
A-153	4	Minimum Radiation Shielding Requirements, Reactor and Auxiliary Building, Plan of El. 634'-0"	12.3-4
A-158 Sh 1	3	Minimum Radiation Shielding Requirements, Reactor and Auxiliary Building, Plan of El. 634'-6", 648'-6", and 659'-0"	12.3-9
A-158 Sh 2	3	Minimum Radiation Shielding Requirements, Solid Radwaste Building, Plan of El. 634'-0" and 652'-0"	12.3-42
A-170	4	Radiation Zoning - Reactor and Auxiliary Buildings Plan of El. 568'-0"	12.3-16
A-171	3	Radiation Zoning - Reactor and Auxiliary Buildings Plan of El. 584'-0"	12.3-17
A-172	4	Radiation Zoning - Reactor and Auxiliary Buildings Plan of El. 599'-0"	12.3-18
A-173	7	Radiation Zoning - Reactor and Auxiliary Buildings Plan of El. 614'-0"	12.3-19
A-174	3	Radiation Zoning - Reactor and Auxiliary Buildings Plan of El. 635'-6"	12.3-20
A-175	4	Radiation Zoning - Reactor and Auxiliary Buildings Plan of El. 645'-0"	12.3-21
A-176	4	Radiation Zoning - Reactor and Auxiliary Buildings Plan of El. 659'-0"	12.3-22
A-177	2	Radiation Zoning - Reactor and Auxiliary Buildings Plan of El. 674'-0" & 685'-0"	12.3-23

PLANT ARRANGEMENT

Bechtel Dwg No.	Rev.	Title	FSAR Fig. No.
A-178 Sh 1	4	Radiation Zoning - Solid Radwaste and Auxiliary Buildings Plan of El. 634'-6" 648'-6" and 659'-0"	12.3-24
A-178 Sh 2	5	Radiation Zoning - Solid Radwaste Building Plan of El. 634'-0" and 652'-"	12.3-43
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Bechtel Dwg No.	Rev.	Title	FSAR Fig. No.
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Bechtel Dwg No.	Rev	Title	FSAR Fig. No.
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Bechtel Dwg No.	Rev.	Title	FSAR Fig. No.
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M-416 Sh 1B	3	Component Cooling Water Unit 1	9.2-7 Sh 2
M-416 Sh 2A	2	Component Cooling Water Unit 1	9.2-8 Sh 1
M-416 Sh 2B	2	Component Cooling Water Unit 1	9.2-8 Sh 1
M-417 Sh 1A	3	Component Cooling Water Unit 2	9.2-9 Sh 1
M-417 Sh 1B	3	Component Cooling Water Unit 2	9.2-9 Sh 2
M-417 Sh 2A	2	Component Cooling Water Unit 2	9.2-10 Sh 1
M-417 Sh 2B	2	Component Cooling Water Unit 2	9.2-10 Sh 2
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M-420 Sh 1A	2	Service Water Turbine Building - Units 1 & 2	9.2-4 Sh 1
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Bechtel Dwg No.	Rev.	Title	FSAR Fig. No.
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M-431 Sh 2B	0	Main Steam Supply System - Unit 1 - Later	10.3-2 Sh 2
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M-432 Sh 1B	2	Main Steam Supply System - Unit 2	
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Bechtel Dwg No.	Rev.	Title	FSAR Fig. No.
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M-433B	2	Auxiliary Steam System - Unit 1	10.4-1 Sh 2
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M-436 Sh 1A	2	Turbine Extraction, Heater Vents and Drains - Unit 1	10.2-1 Sh 1
M-436 Sh 1B	2	Turbine Extraction, Heater Vents and Drains - Unit 1	10.2-1 Sh 2
M-436 Sh 2A	1	Turbine Extraction, Heater Vents and Drains - Unit 1	10.2-2 Sh 1
M-436 Sh 2B	1	Turbine Extraction, Heater Vents and Drains - Unit 1	10.2-2 Sh 2
M-437 Sh 1A	3	Turbine Extraction, Heater Vents and Drains - Unit 2	10.2-3 Sh 1
M-437 Sh 1B	3	Turbine Extraction, Heater Vents and Drains - Unit 2	10.2-3 Sh 2
M-437 Sh 2A	2	Turbine Extraction, Heater Vents and Drains - Unit 2	10.2-4 Sh 1
M-437 Sh 2B	2	Turbine Extraction, Heater Vents and Drains - Unit 2	10.2-4 Sh 2
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Bechtel Dwg No.	Rev.	Title	FSAR Fig. No.
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M-438 Sh 3B	5	Condensate and Feedwater System - Unit 1	10.4-10 Sh 2
M-438 Sh 4	2	Condensate and Feedwater System - Unit 1	10.4-10 Sh 3
M-439 Sh 1A	4	Condensate and Feedwater System - Unit 2	10.4-11 Sh 1
M-439 Sh 1B	2	Condensate and Feedwater System - Unit 2	10.4-11 Sh 2
M-439 Sh 2A	3	Condensate and Feedwater System - Unit 2	10.4-12 Sh 1
M-439 Sh 2B	1	Condensate and Feedwater System - Unit 2	10.4-12 Sh 2
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M-440B	3	Condensate Demineralizer System - Unit 1	10.4-4 Sh 2
M-441A	1	Condensate Demineralizer System - Unit 1	10.4-5 Sh 1
M-441B	2	Condensate Demineralizer System - Unit 1	10.4-5 Sh 2

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Bechtel Dwg No.	Rev.	Title	FSAR Fig. No.
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M-442B	2	Condensate Demineralizer System - Unit 2	10.4-6 Sh 2
M-443A	1	Condensate Demineralizer System - Unit 2	10.4-7 Sh 1
M-443B	3	Condensate Demineralizer System - Unit 2	10.4-7 Sh 2
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M-446B	3	Circulating Water - Units 1 & 2	10.4-3 Sh 2
M-446C	1	Circulating Water - Units 1 & 2	10.4-3 Sh 3
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M-447 Sh 1B	3	Service Water, and Circulating Water Chemical Addition	

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Bechtel Dwg No.	Rev.	Title	FSAR Fig. No.
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M-447 Sh 3B	3	Circulating Water and Service Water Chemical Addition	
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Bechtel Dwg No.	Rev.	Title	FSAR Fig. No.
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M-457 Sh 3A	3	Chilled Water Safeguard Equipment Unit 2	9.2-25 Sh 1
M-457 Sh 3B	4	Chilled Water Safeguard Equipment Unit 2	9.2-25 Sh 2
M-457 Sh 4A	1	Chilled Water Turbine Building Unit 1	9.2-21 Sh 1

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Bechtel Dwg No.	Rev.	Title	FSAR Fig. No.
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Bechtel Dwg No.	Rev.	Title	FSAR Fig. No.
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M-461 Sh 2B	2	Process Steam Evaporator System	10.4-15 Sh 2
M-461 Sh 2C	0	Process Steam Evaporator System	10.4-15 Sh 3
M-461 Sh 3A	2	Process Steam Evaporator System	10.4-16 Sh 1
M-461 Sh 3B	1	Process Steam Evaporator System	10.4-16 Sh 2
M-461 Sh 4A	1	Process Steam Evaporator System	10.4-17 Sh 1
M-461 Sh 4B	1	Process Steam Evaporator System	10.4-17 Sh 2
M-461 Sh 5A	1	Process Steam Evaporator System	10.4-18 Sh 1
M-461 Sh 5B	2	Process Steam Evaporator System	10.4-18 Sh 2
M-461 Sh 6	5	Process Steam Evaporator System	10.4-19
M-461 Sh 7	4	Process Steam Evaporator System	10.4-19 Sh 1
M-461 Sh 8	2	Process Steam Evaporator System	10.4-19 Sh 2
M-462	7	HVAC - Reactor Building	9.4-10A

P&IDs

Bechtel Dwg No.	Rev.	Title	FSAR Fig. No.
M-463 Sh 1A	3	Miscellaneous Gas System Hydrogen Supply	9.3-41 Sh 1
M-463 Sh 1B	3	Miscellaneous Gas System Hydrogen Supply	9.3-41 Sh 2
M-463 Sh 2A	2	Miscellaneous Gas System Carbon Dioxide Supply	9.3-43 Sh 1
M-463 Sh 2B	2	Miscellaneous Gas System Carbon Dioxide Supply	9.3-43 Sh 2
M-463 Sh 3	3	Miscellaneous Gas System Nitrogen Supply	9.3-42
M-464	6	Cooling Pond Blowdown and Makeup System	10.4-24
M-465 Sh 1	5	HVAC - Control Room-Battery Room-Switchgear and Cable Spreading Room	9.4-1
M-465 Sh 2	5	HVAC - Control Room-Battery Room-Switchgear and Cable Spreading Room	9.4-2
M-466	6	HVAC Access Control and Computer Area	9.4-12
M-467 Sh 1	1	HVAC Office and Service Buildings	9.4-17
M-467 Sh 2	1	HVAC Office and Service Buildings	9.4-18 Sh 1
M-467 Sh 3	1	HVAC Office and Service Buildings	9.4-18 Sh 2
M-468 Sh 1	3	HVAC Diesel Generator Building and Service Water Pump Structure	9.4-11
M-468 Sh 2	2	Miscellaneous Structures HVAC	9.4-20
M-468 Sh 3A	1	Miscellaneous Building HVAC System (Evaporator and Auxiliary Boiler Building)	
M-468 Sh 3B	1	Miscellaneous Building HVAC System (Evaporator and Auxiliary Boiler Building)	
M-468 Sh 4	2	Miscellaneous Structure HVAC (Guardhouse)	9.4-21

P&IDs

Bechtel Dwg No.	Rev.	Title	FSAR Fig. No.
M-468 Sh 5	2	Miscellaneous Structure HVAC	9.4-22
M-468 Sh 6	0	Miscellaneous Structure HVAC	9.4-22 Sh 1
M-469A	3	Boron Recovery Degasifier	9.3-45 Sh 1
M-469B	3	Boron Recovery Degasifier	9.3-45 Sh 2
M-470 Sh 1A	3	Chemical and Oily Waste System	9.5-30A
M-470 Sh 1B	3	Chemical and Oily Waste System	9.5-30B
M-470 Sh 2A	3	Chemical Waste System	9.5-29 Sh 1
M-470 Sh 2B	3	Chemical Waste System	9.5-29 Sh 2
M-472 Sh 1	1	Miscellaneous Instrumentation Reactor Building Unit 1	6.2-119
M-472 Sh 2	1	Miscellaneous Instrumentation Reactor Building Unit 2	6.2-120
M-478 Sh 1	1	Preliminary Process Steam Radiation Monitoring On-Line Monitoring System	11.6-1 Sh 1
M-478 Sh 2	1	Preliminary Process Steam Radiation Monitoring On-Line Monitoring System	11.6-1 Sh 2
M-478 Sh 3	1	Preliminary Process Steam Radiation Monitoring On-Line Monitoring System	11.6-1 Sh 3
M-478 Sh 4	1	Preliminary Process Steam Radiation Monitoring On-Line Monitoring System	11.6-1 Sh 4

R. Budwani
Rules Court West, 12W
Route 46
Lodi, N. J. 07644

December 18, 1981

Dear Sir:

It is my understanding that the CASE LOAD FORECAST PANEL visited the construction site of the following nuclear unit during 1981.

Plant: Midland 1&2
Applicant: Consumers Power Co.
Docket No.: 50-329/330

As ~~licensing~~ Resident inspector Project Manager for this project, I shall be highly obliged if you can kindly arrange to send me a copy of the applicant's presentation* and the summary of NRC's evaluation for the above nuclear project.

Your cooperation and help will be deeply appreciated. The inconvenience caused is regretted.

With compliments and thanks.

Very truly yours,

R N Budwani

R. N. Budwani

RNB/mm

* August 25-27, 1981

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