

09/24/82

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )

CONSUMERS POWER COMPANY )

(Midland Plant, Units 1 and 2) )

Docket Nos. 50-329 OL & OM  
50-330 OL & OM

NRC STAFF RESPONSE TO INTERVENOR BARBARA STAMIRIS'  
MOTION FOR PARTIAL INITIAL DECISION ON QA ADEQUACY

I. INTRODUCTION

On September 4, 1982, Intervenor Barbara Stamiris filed a motion entitled "Stamiris Motion For Partial Initial Decision on QA Adequacy In Soils Remedial Work Prior to Commencement of Remedial Underpinning Excavations" ("Motion"). The basis for Ms. Stamiris' Motion is that the history of quality assurance problems at the site requires that this Board issue a partial initial decision regarding the adequacy of quality assurance implementation before major underpinning excavation is allowed to begin. She specifically requests the Licensing Board to grant the following relief: (1) place a temporary work hold on underpinning excavation work pending Board assurance of QA adequacy with respect to soils remedial work, (2) request that the Office of Investigation expedite its investigation of soils remedial events and possible violations of this Board's April 30th Order, (3) direct all parties to begin at once preparing testimony on the question of soils-remedial QA adequacy, based on evidence currently available, and (4) establish the

DESIGNATED ORIGINAL

Certified By

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earliest possible hearing dates for resolution of the soils-remedial QA adequacy issues prior to commencement of underpinning excavations.

The Staff urges that the Motion be denied because (1) it does not intend to authorize underpinning excavation work until it is satisfied with CPC's proposals concerning QA (See discussion of CPC's September 17, 1982 letters below) and (2) any underpinning excavation work which the Staff authorizes will be accomplished under the close scrutiny of a step-by-step authorization procedure.

## II. BACKGROUND

On December 6, 1979, the NRC Staff issued an Order Modifying Construction Permits (1979 Order) which would have prohibited certain soils related construction activities unless CPC obtained construction permit amendments authorizing such work. The 1979 Order provided that it would become effective on the expiration of the period during which a hearing could be requested, or in the event a hearing was requested, on the date specified in an Order made following the hearing. On December 26, 1979, CPC requested a hearing.

The bases for the 1979 Order were (1) quality assurance deficiencies involving the settlement of the diesel generator building and soil activities at the Midland site, (2) a material false statement in the FSAR and (3) unresolved safety issues concerning the adequacy of remedial actions to correct deficiencies in soil construction in and around safety related structures and systems.

The first basis for the 1979 Order, a quality assurance breakdown with respect to soils placement, has been the subject of a number of

hearing sessions. In July 1981, CPC and the Staff stipulated that prior to December 6, 1979 there was a breakdown in quality assurance with respect to soils activities at Midland. (Joint Exhibit 1, Tr. 1187). On July 13, 1981, James Keppler, Director of Region III, presented Staff testimony on the issue of CPC's ability to appropriately implement its quality assurance program with respect to soils work (Direct testimony follows Tr. 1864). Mr. Keppler testified that based upon revisions in CPC's QA program, improved implementation of the program, and other factors, the Staff had reasonable assurance that quality assurance and quality control programs would be appropriately implemented for soils construction activities, including remedial action taken to correct inadequate soils placement.

Since that time, many concerns about implementation of quality assurance at Midland have arisen. In Attachment A to her Motion, Ms. Stamiris extensively documents incidents which support her concerns. In its April 30, 1982 Memorandum and Order, LBP-82-35, 15 NRC \_\_\_\_ (1982), the Board expressed doubt whether, in the absence of Staff review and approval, CPC would carry out certain remedial soils activities using appropriate QA procedures and principles. (Slip opinion at 14-15.)<sup>1/</sup> On June 29, 1982, the Staff advised the Board that it would be necessary to supplement its testimony with respect to quality assurance at Midland.

As a result of the Staff's increased concerns about QA, which have been discussed with CPC, two letters dated September 17, 1982 were sent

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<sup>1/</sup> The April 30, 1982 Order prohibited CPC from proceeding with all work covered by the 1979 Order, along with certain additional work, unless CPC obtained explicit Staff approval beforehand.

to the Staff summarizing steps CPC intends to take to improve QA both generally and specifically with respect to remedial soils work.<sup>2/</sup>

The Staff is reviewing these submittals and will not authorize underpinning excavation until the commitments by CPC convince the Staff that QA will improve.

In the event underpinning excavation work is authorized, it will be performed under a significantly increased Staff inspection effort. Since July 1982 a section chief, a project inspector and a civil engineer have been assigned full-time to the Midland site. In August 1982, a second resident inspector was assigned full-time to the site. Effective August 12, 1982, the Staff and CPC initiated an authorization procedure by which the Staff would review construction work covered by the Board's April 30, 1982 Order.<sup>3/</sup>

Under the procedure, CPC submits to Region III each month a detailed list of work anticipated for the next 60 day period. The Staff then decides which work is critical and which is non-critical. If the work is non-critical, CPC may proceed without further concurrence by the Staff. Work that is considered critical may not proceed until CPC receives written authorization from Region III. Work not started within ninety

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<sup>2/</sup> Copies of these letters were sent to the Licensing Board and all parties, but they are attached hereto for the convenience of the reader. Attachments 1 and 2.

<sup>3/</sup> Attachment 3. Although the procedure refers to work covered by the April 30, 1982 Order, it is also being utilized for work approved prior to April 30, 1982.

days, critical or non-critical, must be resubmitted for authorization. At present, Region III has approved no major remedial soils work.

### III. DISCUSSION

The Commission has held that summarily suspending rights under a license or construction permit is drastic action that should be taken only in exceptional circumstances. In Consumers Power Company, (Midland Plant, Units 1 and 2), CLI-73-38, 6 AEC 1082, 1083 (1973), the Commission stated:

The norm for administrative action modifying outstanding licenses embraces a prior opportunity to be heard. In exceptional circumstances, however, the Director is authorized to take summary action. See 10 CFR 2.202(f); section 9(b), Administrative Procedure Act, 5 U.S.C. 558(c); section 181, Atomic Energy Act of 1954, as amended, 42 U.S.C. 2231. But it has always been recognized that summary administrative action substantially curtailing existing rights - here, the right to construct a nuclear power plant pursuant to a validly issued construction permit - is a "drastic procedure."

Such action, unless warranted by compelling safety considerations, can have serious consequences. Unwarranted suspension of construction of a needed generating plant is contrary to the public interest. Moreover, a period of enforced suspension of construction may result in layoffs and consequent hardship for employees at the site.

See also, Nuclear Regulatory Commission, CLI-77-3, 5 NRC 16, 20-21 (1977).

As discussed above, the Staff will authorize no underpinning excavation work until it is satisfied with CPC's commitments taken to improve QA. In the event work is authorized, allowing construction to proceed under the Staff's expanded inspection effort is a more effective means for both the Board and the Staff to evaluate whether remedial work

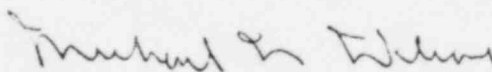
will be performed in a satisfactory manner. Pursuant to the authorization procedure, review of critical work, as defined by Region III, is approved on a step-by-step basis. Should a step not be carried out properly, it may be timely corrected before subsequent work renders corrective action more difficult. Furthermore, by monitoring the work in steps, Region III is able to withhold future authorization if it is dissatisfied with CPC's implementation of work steps previously authorized.

The existence of the expanded inspection effort also alleviates another concern raised by Ms. Stamiris' motion. Ms. Stamiris states that "the NRC, Consumer's and the Board, are willing to accept hearings based once again on subjective judgements [sic] and conclusory statements about future QA adequacy and proposed QA/QC solutions,"<sup>4/</sup> (emphasis in original). With the authorization procedure, the Staff's judgments will be more than "subjective". They will be based on actual observations of step-by-step implementation of remedial work.

### III. CONCLUSION

For the foregoing reasons, the Staff opposes Ms. Stamiris' motion and urges that it be de

Respectfully submitted,



Michael N. Wilcove  
Counsel for NRC Staff

Dated at Bethesda, Maryland  
this 24th day of September 1982

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<sup>4/</sup> Motion, p. 5.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

CONSUMERS POWER COMPANY

(Midland Plant, Units 1 and 2)

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Docket Nos. 50-329 OM & OL  
50-330 OM & OL

CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF RESPONSE TO INTERVENOR BARBARA STAMIRIS' MOTION FOR PARTIAL INITIAL DECISION ON QA ADEQUACY" in the above-captioned proceeding have been served on the following by deposit in the United States mail, first class, or, as indicated by an asterisk through deposit in the Nuclear Regulatory Commission's internal mail system, this 24th day September, 1982.

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NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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CONSUMERS POWER COMPANY	)	Docket Nos. 50-329 OM & OL
(Midland Plant, Units 1 and 2)	)	50-330 OM & OL

AFFIDAVIT OF DARL S. HOOD

1. My name is Darl S. Hood. I am Project Manager for the Midland Plant, Units 1 and 2.

2. I have read the "NRC Staff Response To Intervenor Barbara Stamiris' Motion For Partial Initial Decision On QA Adequacy" (Staff Response).

3. The description of the Staff's expanded inspection effort contained in the Staff Response is accurate.

4. Attachment 3 to the Staff Response is a true copy of the "NRC and CPCO Work Authorization Procedure."

Respectfully submitted,

*Darl S. Hood*  
Darl S. Hood

Sworn and subscribed before me  
this 24th day of September 1982

*Clarence L. Hancock*  
Notary Public

My commission expires: July 1, 1986



Consumers  
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James W Cook  
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September 17, 1982

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MIDLAND NUCLEAR COGENERATION PLANT  
MIDLAND DOCKET NOS 50-329, 50-330  
QUALITY ASSURANCE PROGRAM IMPLEMENTATION FOR SOILS REMEDIAL WORK  
FILE: 0485.16 SERIAL: 18845

This letter summarizes recent discussions with NRC management regarding implementation of soils remedial construction and presents the Company's documentation of those discussions.

#### BACKGROUND

The 1980/1981 SALP Report, presented to Consumers in late April of this year, indicated that activities in the soils area should receive more inspection effort on the part of both the NRC and CP Co. Follow-up discussions with the NRR staff and Region III Inspectors led to the conclusion that the Quality Assurance Program and its definition was adequate; however, there was concern that certain aspects were not being or might not be satisfactorily implemented.

Consumers Power has performed an in-depth review of the implementation plans for the Midland soils work activities. This review included the areas of design and construction requirements and plans, organization and personnel, project controls and management involvement. The results of this review and the proposed steps to assure the successful implementation of all aspects of the work were discussed with the NRC management in a meeting held in Chicago on September 2, 1982.

### STEPS TO IMPROVE IMPLEMENTATION

A number of new steps have or are being taken by Consumers Power Co to enhance the implementation of the quality program with regard to the soils remedial work. These measures touch upon all aspects of the work, from design to post-construction verification and include the following:

- (1) Retaining a third party to independently assess the implementation of the auxiliary building underpinning work;
- (2) Integrating the soils QA and QC functions under the direction of MPQAD;
- (3) Creating a "Soils" project organization with dedicated employees and single-point accountability to accomplish all work covered by the ASLB order;
- (4) Establishing new and upgraded training activities, including a special quality indoctrination program, specific training in underpinning activities, and the use of a mock-up test pit for underpinning construction training;
- (5) Developing a quality improvement program (QIP), specifically for soils remedial work;
- (6) Increasing senior management involvement in the soils remedial project through weekly, on-site management meetings wherein both work progress and quality activities are reviewed;
- (7) Improving systems for tracking of and accounting for design commitments.

What follows is a description of the soils implementation plan, as it will be carried out using the new approaches outlined above, together with other specific aspects which we believe will be critical to the successful performance of the job. The discussion is limited to the implementation features specific to soils, is divided into areas roughly describing the progression of the job from design to completion and ends with a description of organizations, management involvement and NRC overview.

### DESIGN ADEQUACY AND IMPLEMENTATION

The design for the required remedial activities is in an advanced state; design details and adequacy have been reviewed by numerous organizations. A special ACRS Subcommittee reviewed the soils activities and commented favorably on the thoroughness and conservatism of the review and remedial approaches. Numerous submittals to the NRC have been presented to clarify the design intent. It is our understanding that the Staff is completing its detailed review of all design aspects and is in the process of issuing an SSER. This advanced state of design has permitted the early development of a thorough planning effort and assisted in the organization and development of a detailed training effort. Following-up on design activities, the Project has assigned to the site a design team comprised of experienced structural and geotechnical engineers under the Resident Engineer. This team will monitor

and review the field implementation as specified in design documents, resolve on a timely basis routine construction questions requiring engineering response and administer the specific contingency plans immediately if any problem should arise during the underpinning work. Additional engineering resources for the soils work will continue to be located in Ann Arbor.

#### IMPLEMENTATION OF DESIGN FEATURES AND COMMITMENTS

All soils activities covered by the ASLB Order of April 30, 1982 are covered under soils-specific QA plans. These plans require that appropriate procedures are in place to accomplish the work in a quality manner and that detailed inspection plans be developed and utilized. Additionally, a Work Authorization Procedure and Work Permit System insure that the NRC and CP Co have specifically authorized and released the work. Under this system, the NRC reviews proposed work details, asks for additional information when necessary and authorizes construction activities in advance. CPCo then authorizes the work to proceed.

To further assure that commitments made to the NRC are properly accounted for in design documents, Consumers Power and Bechtel review the written records of commitments and insure that they are being incorporated into design documents. The Project is currently undertaking an additional review of past correspondence to create a computer listing of commitments. This computer list will be periodically reviewed to insure that commitments are incorporated in design or construction documents in a timely fashion.

#### PERFORMANCE OF PROJECT CONSTRUCTION, QUALITY ASSURANCE AND QUALITY CONTROL ACTIVITIES

To assure that project construction, quality assurance and quality control personnel correctly carry out their appointed tasks, a number of measures have been taken, including a reorganization of quality control, upgraded training programs, direct Company involvement in construction scheduling and control, and utilization of a contract format to minimize any cutting of corners by contractors. These elements of enhanced performance are described more specifically below.

First, the project has reorganized the Soils QA-QC effort, creating an integrated organization with single-point quality accountability under the MPOAD. This new organization is expected to improve QC performance, increase CPCo involvement in the management of the quality control function and improve QA-QC interfaces.

Second, extensive training programs for the soils underpinning work have been developed. This overall training program, which includes the major Construction and Quality organizations involved in soils work, covers both general training in quality and specific training relative to the construction procedures.

The majority of the personnel associated with Remedial Soils work have attended a special Quality Assurance Indoctrination Session. The QA indoctrination has been provided to Bechtel Remedial Soils Group, CPCo

Construction, QC, QA, Mergentime and Spencer, White and Prentis (SW&P) personnel down to the craft foreman level. This training consists of one three-hour session covering Federal Nuclear Regulations, the NRC, Quality Programs in general and the Remedial Soils Quality Plan in detail.

With regard to the work procedures, a requirement on both Mergentime and SW&P is that specific training on the procedures be provided prior to initiating any quality related construction activity. The identification of individuals to receive this training is spelled out in each procedure pertaining to a specific construction activity. Completion of the specific training requirements is a QA hold point which must be satisfied before work can proceed.

In further recognition of the importance of training to the underpinning work, the Company is utilizing a mock-up test pit as part of its training program for underpinning construction. The purpose of this test pit is to provide specific training in the construction of a pier, bell and grillage assembly from initial issuance of design drawings through completion of construction. This allows supervisory and craft personnel to perform work under the conditions, requirements and restraints which will be encountered when the actual underpinning starts. It also allows the various quality organizations to inspect the work and insure that their concerns and requirements are properly reflected in the procedures.

Third, to further enhance the performance of key project organizations, Consumers Power will maintain control over scheduling, both through the construction authorization process and by frequent meetings with the involved contractors and subcontractors. Each week, underpinning subcontractors will present proposed construction work to the Company. In addition, to assure the best quality work, the major subcontracts were entered into on a time-material basis. This should improve subcontractor attention to detail and acceptance of owner direction in the performance of specific construction activities.

Last, the Company is establishing a separate Quality Improvement Program (QIP) for the soils project. Although not part of the formal Quality Assurance program, the QIP is a management system that should be helpful in communicating and reinforcing project policies and expectations to all project participants. To launch this effort, an indoctrination program will be presented to all individuals, stressing the absolutes of Quality and the concept of "Doing it right the first time." Measurements specific to soils will be developed for those critical areas which are indicative of a "quality product". Tracking these activities will provide an indication of the effectiveness of the program. The QIP will provide mechanisms for individual "feedback" from all individuals involved, including the craft personnel.

#### INDEPENDENT ASSESSMENT

A third party will be retained to independently appraise the initial phases of the construction of the auxiliary building underpinning. This consultant will be mobilized as soon as possible and, after familiarizing itself with the design, will evaluate the auxiliary building underpinning construction work at

the site. If significant problems or adverse trends are observed, the third party assessment program will be extended in both scope and duration until a satisfactory conclusion can be drawn. The initial evaluation will be carried out over a three-month period.

The independent assessment will be conducted by a team of nuclear plant construction and quality assurance experts. This team will be supplemented by the addition of an underpinning consultant who will review the soils design documents, construction plans and construction itself to assure not only that the design intent is being implemented but also that the construction is consistent with industry standards. The assessment will further assure that the QA Program is being implemented satisfactorily and that the construction is being implemented in accordance with the construction documents. Arrangements are being made with Stone and Webster Engineering Corp to assume the lead role in this appraisal. They will be assisted by Parsons, Brinkerhoff, Quade and Douglas, Inc who will provide underpinning expertise. The NRC will be apprised of all findings of this independent assessment in a timely manner.

#### ORGANIZATION, MANAGEMENT INVOLVEMENT AND NRC OVERVIEW

The project organization formed for the performance of the soils remedial work incorporates single-point accountability, dedicated personnel to the extent practical, minimum interfaces-particularly at the working level, and a quality organization integrating QA and QC. The soils project organization is tailored to the task at hand. The entire organization, including quality assurance and quality control are staffed with well qualified, experienced personnel, augmented by design consultants and construction subcontractors nationally recognized in the underpinning field.

The soils remedial effort will also include a high level of senior management involvement. Project senior management will conduct weekly in-depth reviews on site of all aspects of the work including quality and implementation of commitments. In addition, the reporting chains to the senior project personnel have been shortened. The Company's CEO is briefed on a regular basis and schedules bi-monthly briefings on all aspects of the project including soils. During the bi-monthly briefings, the CEO normally tours the Midland site.

Complementing the CPCo management role, NRC Region Management overview of the construction process will be enhanced by monthly meetings, agreed upon by the Region, to overview the results of the quality program and the progress of the soils project. These meetings will cover any or all aspects of the project of general or special interest to the NRC management.

#### CONCLUSION

Based on the discussion outlined above, CP Co believes that the soils program has been thoroughly and critically evaluated and that all prerequisites for successful implementation have been or are being accomplished. The Company's program, with the initial overview from the independent implementation assessment, and the continuing overview by the NRC staff and management should

provide adequate assurance that the remedial soils activities will be successfully completed.

*James W. Cook*

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CONSUMERS POWER COMPANY  
Midland Units 1 and 2  
Docket No 50-329, 50-330

Letter Serial 18845 Dated September 17, 1982

At the request of the Commission and pursuant to the Atomic Energy Act of 1954, and the Energy Reorganization Act of 1974, as amended and the Commission's Rules and Regulations thereunder, Consumers Power Company submits information regarding the implementation of the Consumers Power Company Quality Program for the Midland Plant Soils remedial work.

CONSUMERS POWER COMPANY

By           /s/ J W Cook            
J W Cook, Vice President  
Projects, Engineering and Construction

Sworn and subscribed before me this 17th day of Sept 1982 .

          /s/ Patricia A Puffer            
Notary Public  
Bay County, Michigan

My Commission Expires 3-4-86





James W Cook  
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September 17, 1982

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MIDLAND NUCLEAR COGENERATION PLANT  
MIDLAND DOCKET NOS 50-329, 50-330  
QUALITY ASSURANCE PROGRAM IMPLEMENTATION  
FILE: 0485.16 SERIAL: 18850

REFERENCE: CPCo Letter Serial 18845, 9/17/82, "Quality Assurance Program  
Implementation for Soils Remedial Work"

The referenced letter summarized Consumers Power Company's discussions with the NRC management regarding the implementation of the Quality Assurance Program for the Midland soils remedial work. In addition to the discussions specifically related to soils, the total Midland Quality Assurance Program implementation was reviewed and areas were identified where additional efforts should be directed to insure successful overall project implementation and the performance of the primary inspection function (QC) on site. In response to these concerns Consumers Power made two significant new commitments which are conceptually described in the following paragraphs. Additional documentation will be provided as the details of these commitments are worked out.

#### Quality Control Function

In order to improve the performance of the Quality Control function and to make it more responsive to direction from the Quality Assurance organization, the responsibility for directing the entire Quality Control function will be assumed by Consumers Power. The Quality Control group will functionally report to MPQAD. The programmatic aspects now in place will continue to be used and the combined inspection resources of both Bechtel and CPCo will be integrated. This reorganization will be fully implemented as soon as the appropriate procedural changes are finalized. The integration of the QC resources for soils into MPQAD has already been accomplished as a separate action.

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### Independent Verification - Total Project

Consumers Power proposes a new and expanded approach for verifying the overall quality of the project. This approach will give a broader overview than the assessments currently being recommended by the NRC for other NTOL plants. The assessment which is suggested for Midland is to combine an INPO type construction project evaluation, which is a broad "horizontal" type review of many aspects of current project operations with the detailed "vertical slice" review of all aspects, current and historical of a critical plant system or subsystem. The entire review will be performed by one or more independent contractors who are currently being selected. With the assistance of the selected contractors, the detailed plans for this extensive independent assessment will be finalized and presented to NRC management shortly for their concurrence prior to initiating the major work activities.

The INPO portion of the program will be initiated immediately at least through the planning phase to comply with the INPO schedule and industry commitments to the NRC. The INPO construction program evaluation for Midland will differ from the majority of the industry's self-initiated evaluations in that an independent contractor rather than utility personnel will carry out the INPO evaluation. The results will then be overviewed by the INPO staff to assure adequacy and consistency with other evaluations.

### Additional Assessment Programs

In addition to the above, Consumers Power has proposed to retain a qualified third party for an assessment of the underpinning activities as detailed in the referenced letter.

Consumers Power Company has also initiated other appraisals to assess the adequacy of the Quality Assurance Program. Two major recent examples of this practice that have occurred are as follows.

In 1981, Management Analysis Company (MAC) conducted an assessment which focused on performance in three major areas as follows:

1. Adequacy and timeliness of both part and process corrective actions taken on a sample of the historical hardware problems that have been identified at Midland over its lifetime.
2. The degree to which the physical characteristics of selected supplied components and parts meet their respective quality requirements.
3. The overall adequacy of the Quality Assurance Program with particular emphasis in corrective actions, effectiveness of the supplier documentation review efforts and personnel qualifications.

This assessment has been completed, the results were positive and all open items have been resolved and closed. The final report has been previously submitted to the NRC.

A Bechtel Corporate Staff project evaluation was initiated in April 1982. A report on the results of this assessment is being finalized at this time. The

purpose of this evaluation was to review the Midland engineering activities to determine if design criteria have been implemented and if the design assumptions, design methods, and the design processes are satisfactory. Bechtel Corporate Management was asked to initiate this assessment in order to certify that the Midland project met all the standards expected of any Bechtel project. To carry out this assignment the assessment team was specifically chosen to be independent from the Bechtel Ann Arbor Power Division. The team consisted of senior experienced personnel with appropriate expertise having previously performed similar work on other projects. A Consumers Power representative was a direct participant on the assessment team. The final report will be sent to the NRC upon completion and whatever other documentation or discussion as may be requested will be provided.

Conclusion

Based on the discussion outlined above and in the reference letter, Consumers Power believes that steps have been taken to insure both the successful implementation of the remaining work to complete the plant and a verification program, including quality records, test program results, and third party assessments, that will certify the adequacy of the plant as constructed.

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WDPatton, Esq  
SJPoulos, Geotechnical Engineers  
FRinaldi, NRC  
HSingh, Army Corps of Engineers  
BStamiris

CONSUMERS POWER COMPANY  
Midland Units 1 and 2  
Docket No 50-329, 50-330

Letter Serial 18850 Dated September 17, 1982

At the request of the Commission and pursuant to the Atomic Energy Act of 1954, and the Energy Reorganization Act of 1974, as amended and the Commission's Rules and Regulations thereunder, Consumers Power Company submits information regarding the implementation of the Consumers Power Company Quality Program for the Midland Plant.

CONSUMERS POWER COMPANY

By           /s/ J W Cook            
J W Cook, Vice President  
Projects, Engineering and Construction

Sworn and subscribed before me this 17th day of Sept 1982 .

          /s/ Patricia A Puffer            
Notary Public  
Bay County, Michigan

My Commission Expires 3-4-86

AUG 16 1982

Docket No. 50-329  
Docket No. 50-330

MEMORANDUM FOR: Midland Section

FROM: Wayne D. Shafer, Chief, Midland Section

SUBJECT: NRC AND CPCO WORK AUTHORIZATION PROCEDURE

Attached is the NRC and CPCo Work Authorization Procedure developed to provide a mechanism for NRC Region III review and authorization of activities to be implemented at the Midland Site as described in the ASLB Order.

Wayne D. Shafer, Chief  
Midland Section

Attachment: As stated

8-208240308

August 16, 1982

cc w/attachment:

DMB/Document Control Desk (RIDS)  
Resident Inspector, RIII  
The Honorable Charles Bechhoefer, ASLB  
The Honorable Jerry Harbour, ASLB  
The Honorable Frederic, P. Cowan, ASLB  
The Honorable Ralph S. Decker, ASLB  
Michael Miller  
Ronald Callen, Michigan  
Public Service Commission  
Myron M. Cherry  
Barbara Stamiris  
Mary Sinclair  
Wendell Marshall  
Colonel Steve J. Gadler (P.E.)  
James G. Keppler  
A. Bert Davis  
Robert F. Warnick  
Ronald N. Gardner  
Ross B. Landsman  
Ronald J. Cook  
Bruce L. Burgess

NRC AND CPO  
WORK AUTHORIZATION PROCEDURE

Effective Date August 12, 1982

APPROVED *L. Mooney*  
Midland Project Office

APPROVED *W. D. Shefer*  
Chief, Midland Section OSC



## NRC AND CPCO WORK AUTHORIZATION PROCEDURE

### SCOPE

To review all construction work covered by the ASLB Order of April 30, 1982.

### PURPOSE

To provide a mechanism for NRC Region 3 review and authorization of activities to be implemented at the Midland site as described in the ASLB Order.

To designate appropriate NRC and CPCO responsible individuals.

### REFERENCES

- 1) ASLB Memorandum and Order dated April 30, 1982.
- 2) ASLB Memorandum and Order dated May 7, 1982.
- 3) Letter to J W Cook from D G Eisenhut dated May 25, 1982, "Completion of Soils Remedial Activities Review".

### PROCEDURE

- 1.0 CPCo Project Management Organization will provide, at the beginning of the month a detailed list of all work activities to be implemented. This list will cover the construction activities anticipated to be in progress for the next 60-day period.
- 2.0 Upon receipt of the list the NRC will review the list and designate those activities as critical or non critical and advise CPCo Construction in writing of this designation.
  - 2.1 For those activities designated non critical, CPCo is authorized to proceed with the work. This work shall be accomplished in accordance with the staff approved Quality Assurance Plan.
  - 2.2 For those activities designated critical, the NRC will advise CPCo Construction of the required details essential for further staff review to determine the specifics of the work. CPCo is not authorized to proceed with work prior to receiving written authorization from the NRC.

- 2.2.1 CCo Construction will provide the work details as requested by the Region.
- 2.2.2 After review by the Region, CCo will be provided with specific written authorization to conduct the identified work activities.
- 2.3 Should these authorized activities not start within 90 days, these activities will be resubmitted for authorization.
- 3.0 Changes may be required for authorized critical and non critical activities. These changes shall be processed as follows:
  - 3.1 Changes that alter the description of a previously submitted activity, in 1.0 above, shall be submitted to the Region for review. The review and authorization process will be as in 2.0 above.
  - 3.2 Changes which do not alter the description of a previously submitted activity, in 1.0 above, are not required to be submitted to the NRC but, shall be accomplished in accordance with the staff approved Quality Assurance Plan.
- 4.0 Work activities not previously identified on the work list, in 1.0 above, shall be identified and authorized as in 1.0 and 2.0 above. Approval of these work activities may be given verbally by the NRC responsible individual to the NRC Senior or Resident Inspector, who will then issue written authorization.
- 5.0 Emergency work activities may be performed to mitigate conditions which could affect personnel safety or could result in damage to facilities and equipment.

These activities shall require immediate notification of the Senior Resident Inspector.

6.0 Responsible individuals

6.1 The NRC representative shall be the Chief, Midland Section Office of Special Cases or his designee.

6.2 The CPCo designated representative shall be the Site Manager or his designee.

7.0 Changes to this procedure shall be approved the the Chief, Midland Section Office of Special Cases and the Site Manager.

WORK ACTIVITY LIST  
FOR SEVEN DAYS FROM LIFTING OF STOP WORK ORDER

- Aux Bldg
1. Operate all instruments in seven day "baseline"
  2. Test all instrumentation systems per C-1493
  3. Adjust set and finalize covers on all instruments
  4. Verify post tension systems on control tower
  5. Maintain instrument system
- Freeze Wall
6. Continue monitoring utility protection pits (4)
  7. Install clay to below duct bank (pit 4) (details attached)
  8. Add additional wells (up to 5) on west perimeter (outside C-45)
  9. Continue operation of systems and wells
- FIVP
10. Install and grout bolts and plates
  11. Lift off test on bolts (and hardness tests)
  12. Tension bolts
- Crack Mapping
13. Clean FIVP to crack map
  14. Crack map FIVP's
  15. Crack map EPA's
  16. Crack map remainder Aux Bldg
- Underpinning
17. Drift to piers 12 E/W
  18. Dig piers 12 E/W
  19. Install piers
  20. Drift to piers 9 E/W
  21. Implement C-200 if needed
  22. Install bumpers, handrails, stairs, etc in access shaft
- SWPS
23. Complete fireline relocation
  24. Install 6 deep seated benchmarks
  25. Install ejector wells
  26. Install soldier piles
  27. Excavate 36" service water pipe (train A)
- BWST
28. Construct new ring beams
- Other
29. Finish 72" line repair
  30. Approval of Quality Assurance Plans