

Contains Kane Interview - Pg. 13

J. Kane

Rec'd 6/30/83
from N. Wnght



UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF INVESTIGATIONS FIELD OFFICE, REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

DATE: June 2, 1983

REPORT OF INVESTIGATION

TITLE: Midland Nuclear Power Plant
Alleged Violation of Atomic Safety Licensing
Board Order

SUPPLEMENTAL: DN 50-329; 50-330

CASE NUMBER: 3-82-061

CONTROL OFFICE: Chicago STATUS: CLOSED

PERIOD OF INVESTIGATION: January 3-March 30, 1983

REPORTING INVESTIGATOR: Charles H. Weil
Charles H. Weil, Investigator
Office of Investigations Field Office,
Region III

PARTICIPATING PERSONNEL: Eugene T. Pawlik
Eugene T. Pawlik, Director
Office of Investigations Field Office,
Region III

REVIEWED BY: Eugene T. Pawlik
Eugene T. Pawlik, Director
Office of Investigations Field Office,
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William J. Ward, Director
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Office of Investigations, Headquarters

Roger Fortuna, Deputy Director
Office of Investigations, Headquarters

APPROVED BY: Ben B. Hayes, Director
Office of Investigations, Headquarters

SUMMARY

On April 30, 1982, the Atomic Safety Licensing Board (ASLB) for the Midland Nuclear Power Plant issued an Order requiring the Consumers Power Company (CPCO) to receive from the Nuclear Regulatory Commission (NRC) prior approval before starting an excavation in the remedial soils program. On July 28, 1982, NRC Soils Inspector LANDSMAN discovered CPCO had excavated beneath the "deep Q duct bank" without receiving prior approval from the NRC. On August 4, 1982, LANDSMAN found CPCO had excavated for the relocation of a fire line without first receiving approval from the NRC. CPCO Remedial Soils Section Head WHEELER stated he and LANDSMAN had agreed that prior approval from the NRC was not necessary for minor excavations. WHEELER stated both excavations were minor and within the meaning of his understanding with LANDSMAN. WHEELER stated he did not intentionally violate the ASLB Order and he did not know LANDSMAN had previously cautioned against the excavation beneath the duct bank. LANDSMAN stated he did have a conversation with WHEELER and had agreed to review excavation permits for minor construction after the excavations had begun. LANDSMAN considered minor excavations to be the digging of security fence postholes. LANDSMAN also stated he had told CPCO not to excavate beneath the deep Q duct bank. CPCO Remedial Soils Section members SIBBALD and MURRAY each advised excavation permits for the duct bank and fire line were issued with the belief the work was minor and within the understanding between WHEELER and LANDSMAN. Midland Project Office Engineer SCHAUB stated he thought the objection to excavating beneath the duct bank was because the type of backfill had not been decided upon prior to beginning the work. SCHAUB further stated he felt the NRC had approved the excavation beneath the duct bank before the work began. ASLB Judges BECHHOEFFER and HARBOUR advised the Order allowed the NRC Staff the latitude to determine if a particular hole should be reviewed prior to commencing work or after the work had begun. CPCO Vice President COOK stated CPCO had not violated the ASLB Order for three reasons: (1) The work was within the understanding between LANDSMAN and WHEELER; (2) The NRC Staff had approved the deep Q duct bank excavation in its May 25, 1982 letter to CPCO; (3) The objection raised by the NRC Staff was not about the excavation, but that the backfill material had not been decided upon prior to starting the excavation. NRR Midland Project Licensing Manager HOOD and NRR Senior Geotechnical Engineer KANE stated they had not given approval for the additional excavation beneath the deep Q duct bank or the fire line relocation excavation.

Purpose of Investigation

The purpose of this investigation was to determine if CPCO had violated the April 30, 1982 ASLB Order amending the construction permits for the Midland Nuclear Power Plant. This Order (Attachment 1) required CPCO to receive approval from the NRC prior to beginning any excavations for the remedial soils work at the Midland facility.

Background

On December 15, 1972, the Atomic Energy Commission issued construction permits to CPCO to build the Midland Nuclear Power Plant, Units 1 and 2 at Midland, MI. CPCO retained Bechtel Power Corporation as the architect-engineer and constructor of the plant. The facilities will utilize pressurized water reactors (PWR) supplied by the Babcock and Wilcox Company.

From 1975 through 1977 approximately thirty feet of compacted fill material was placed overlying the natural soils on the site. During August 1977 some settlement was detected under an Administration Building foundation beam. (The Administration Building houses plant offices and is a non-nuclear-safety-related structure.) CPCO conducted an investigation into the settling of the Administration Building during August and September 1977. CPCO concluded the soil beneath the building had been adequately compacted, except for the soil directly beneath the one foundation beam.

In October 1977 work began on the Diesel Generator Building foundation. During July 1978 the CPCO monitoring program detected excessive settlement of the Diesel Generator Building. The building had settled 3.5 inches at the point of greatest settlement. This is compared to the design prediction of three inches for the expected plant operating life of forty years. CPCO took soil boring samples from under the Diesel Generator Building and concluded the soil beneath the Diesel Generator Building had been inadequately compacted.

During 1979 CPCO conducted soil borings throughout the plant site. The borings indicated soil was inadequately compacted beneath the electrical penetrations of the Auxiliary Building and a portion of the Service Water Pump Structure. CPCO decided to underpin portions of the Auxiliary Building and the Service Water Pump Structure. ---

On April 30, 1983, the Midland ASLB amended the construction permits "to require that the permit holder obtain explicit prior approval from the NRC Staff (to the extent such approval has not already been obtained) before proceeding with the following soils-related activities, and that these activities, with the exception of those already approved by the NRC, and those that the Staff agrees are not critical, shall be controlled by a Staff-approved Quality Assurance Plan:

- (a) any placing, compacting, excavating, or drilling soil materials around safety-related structures and systems... (c) construction work in soil materials under or around safety-related structures and systems such as field installation, or rebedding, of conduits and piping...."

On July 28, 1982 RIII Soils Inspector Ross B. LANDSMAN was at the Midland plant and found CPCO had dug beneath the "deep Q duct bank" without receiving prior approval from the NRC as required by the April 30, 1982, ASLB Order. On August 4, 1982, LANDSMAN was again at the Midland site and found CPCO had excavated for the relocation of a fire line without first receiving the required NRC approval. This investigation was requested by the RIII Regional Administrator to determine the circumstances in which CPCO allegedly violated the April 30, 1982, Midland ASLB Order in excavating beneath the deep Q duct bank and the fire line relocation.

Interview of NRC Soils Inspector

On January 3, 1983, Ross B. LANDSMAN, NRC Region III Soils Inspector, provided the following information to Investigator C. H. WEIL:

On April 30, 1982, the ASLB for the Midland Nuclear Power Plant issued an Order (Attachment 1) requiring "the permit holder (Consumers Power Company) obtain explicit prior approval from the NRC Staff...before proceeding with the following soils-related activities...excavating around safety-related structures and systems..."

In late July 1982 he was at the Midland Nuclear Power Plant to conduct an inspection of the remedial soils work. On July 28, 1982, he inspected the electrical deep Q duct bank and found CPCO had excavated approximately twelve feet beneath the duct bank. The NRC had previously authorized CPCO to excavate one foot below the duct bank. The CPCO remedial soils staff told LANDSMAN the reason for the additional excavation was to seal off the flow of water beneath the duct bank. LANDSMAN stated this additional excavation had not been previously approved as required by the April 30, 1982 ASLB Order. LANDSMAN stated he had warned CPCO several times in May and June 1982 to not extend the excavation beneath the deep Q duct bank (see Attachments 9 and 11).

During a subsequent inspection on August 4, 1982, LANDSMAN found CPCO had excavated near the Service Water Pump Structure in order to relocate a fire line. LANDSMAN stated CPCO had not received prior approval from the NRC Staff before starting this excavation as required by the April 30, 1982 ASLB Order.

LANDSMAN's observations and finding concerning the excavation of the deep Q duct bank and the relocation of the fire line at the Service Water Pump Structure are contained in an August 24, 1982, memorandum to his supervisor (Attachment 2).

Interview of CPCO Remedial Soils Section Head

During the period January 10-March 22, 1983, Robert M. WHEELER, CPCO Remedial Soils Section Head, provided the following information to Investigator C. H. WEIL in the presence of CPCO Attorney James E. BRUNNER:

On April 30, 1982, the Midland ASLB ordered all remedial soils work at the Midland facility to be done with prior approval of the NRC Staff. CPCO stopped all remedial soils work as a result of the ASLB Order. On May 10, 1982, CPCO wrote the NRC staff (Attachment 3) requesting clarification of the remedial soils work approved prior to the issuance of the ASLB Order. This letter included the protection of utilities in the deep Q duct bank. By letter, dated May 25, 1982 (Attachment 4) the NRC Staff agreed with CPCO that "prior explicit concurrence for the activities...had been obtained from the staff prior to the April 30, 1982 Order."

CPCO designed an excavation permit system for the remedial soils work at the Midland facility as a result of the April 30 ASLB Order. The excavation permit system became Bechtel Power Corporation Field Instruction FIC-5.100 (Attachment 5). Paragraph 6.6 of that procedure states, "the sign-off by CPCO Construction is for verification that the excavation and all work associated with the excavation through completion of backfill is within the scope authorized by the NRC."

WHEELER's staff developed an informal three step procedure to ensure NRC concurrence had been received prior to the start of a remedial soils project. The first step was to review NRC correspondence and meeting notes to determine if prior approvals had already been given. Failing this the second step was to contact the Midland Project Office in Jackson, MI, to determine if that office knew of prior NRC approvals. Failing the first two steps they would telephone LANDSMAN.

WHEELER stated he had discussed the excavation permit system with LANDSMAN during May and June 1982. As a result of their discussions LANDSMAN decided it would not be necessary for the NRC to review and approve all minor excavations prior to beginning the work. Rather, LANDSMAN would review the excavation permits during a subsequent visit to the site, after work had begun. LANDSMAN did state he still wanted to review all major excavations (e.g. service water building underpinning) prior to the start of the work. WHEELER made a short note of this conversation with LANDSMAN (Attachment 10).

On July 21, 1982, Excavation Permit No. 46 for an excavation beneath the deep Q duct bank (Attachment 6) was brought to Glenn MURRAY, a member of WHEELER's staff, for CPCO review and NRC concurrence. WHEELER did not recall discussing the deep Q duct bank excavation with MURRAY. WHEELER felt the duct bank excavation was minor construction and within the purview of his conversation with LANDSMAN where prior approvals for minor excavations were not necessary. Excavation beneath the duct bank began on July 23, 1982, at approximately the 599' elevation and went down to approximately the 585' elevation.

On July 26, 1982, Excavation Permit No. 48 (Attachment 7) was brought to Donald E. SIBBALD, a member of WHEELER's staff, for CPCO consideration and

NRC approval. Excavation Permit No. 48 pertained to the rerouting of a fire line. WHEELER stated he felt the relocation of fire line involved minor construction and therefore fell within the understanding with LANDSMAN that prior approval would not be necessary. Excavation commenced on July 27, 1982.

WHEELER stated he was not aware of LANDSMAN's concerns with either excavation. WHEELER contacted other staff members at the Midland facility upon hearing that LANDSMAN considered both excavations to be violations of the ASLB Order. Among those contacted was John FISHER, Bechtel's Remedial Soils Manager. FISHER, as well as all others contacted, did not remember any discussions involving LANDSMAN's concerns with the deep Q duct bank. All of those contacted reviewed their notes of meetings with the NRC staff and did not find any information pertaining to LANDSMAN's concern with the deep Q duct bank with the exception of FISHER. FISHER's notes (Attachment 8) stated in part, "Monitoring Pits ... Pit #4 backfill is questioned...we will proceed w/exposing utility and not proceed with excavating the pit below deep Q until NRC approval.... Question on what is a significant change - they have to be or should be submitted before approval. Agreed procedure - all items will be discussed with LANDSMAN (Region III) if R. LANDSMAN thinks it is significant CPCO will submit."

WHEELER also located a memorandum, "Midland Project-USNRC Exit Meeting (Dr. Ross LANDSMAN of May 21, 1982)" (Attachment 9). This memorandum states in part, "Dr. LANDSMAN confirmed his understanding that this pit would terminate a relatively short distance below the duct and not to be extended lower as originally intended...."

In conclusion, WHEELER stated he felt both excavations for the deep Q duct bank and the fire line relocation were within his understanding with LANDSMAN. WHEELER further stated he believed the excavations had been done within the context of his discussion with LANDSMAN, therefore, he had not intentionally violated the April 30, 1982 Order of the Midland ASLB.

Additionally, WHEELER provided a written statement (Attachment 10).

Reinterview of NRC Soils Inspector

On January 18, 1983, LANDSMAN was reinterviewed by Investigator C. H. WEIL. LANDSMAN stated he recalled having a conversation with WHEELER at which time LANDSMAN agreed to review excavation permits for minor excavations after work had begun. LANDSMAN was shown a copy of WHEELER's memorandum (Attachment 10) which states, "excavation permit procedure is o.k. He (LANDSMAN) will review signed off permits from site visit to site visit. He is only concerned with major excavations such as SWS (Service Water Structure) underpinning."

LANDSMAN agreed with WHEELER's memorandum to the extent that the excavation work permit system was a process to ensure all was in order before beginning the work. LANDSMAN told WHEELER he (LANDSMAN) would review the issued permits during his next bi-weekly visit to the Midland site. LANDSMAN stated the conversation with WHEELER dealt with the digging of security fence post-holes. LANDSMAN considered the postholes to be minor construction.

LANDSMAN stated he never intended for CPCO to proceed with the excavation beneath the deep Q duct bank without prior NRC approval. LANDSMAN offered two documents in support of his position: (1) June 4, 1982, CPCO letter (Attachment 9) which states in part, "Midland Project USNRC Exit Meeting... May 21, 1982...monitoring pits for protection of utilities...Dr. LANDSMAN asked whether the deep Q duct pit was ready. FISHER responded negatively.... Dr. LANDSMAN confirmed his understanding that this pit would terminate a relatively short distance below the duct, and not to be extended lower, as originally intended...." (2) NRC RIII Inspection Report 50-329/82-11; 50-330/82-11 for the period May 19-July 2, 1982 (Attachment 11). Paragraph 3 of that report states,

"The inspector reviewed the procedures and drawings for the four monitoring pits and determined that they were acceptable.... The only open hold point is that they cannot dig below the deep duct bank until they get NRR concurrence on the proposed method."

Interview of CPCO Construction Engineer

On January 11-27, 1983, Glenn M. MURRAY, Construction Engineer in the CPCO Remedial Soils Section, provided the following information to Investigator C. H. WEIL in the presence of CPCO Attorney J. E. BRUNNER:

On April 30, 1982, the Midland ASLB issued an Order pertaining to remedial soils work at the Midland facility. Subsequently, CPCO issued a stop work order on all remedial soils work at the facility until such time as an excavation procedure could be drafted and coordinated with the NRC. Bechtel Power Corporation Field Instruction No. 5.100, Excavation Permit System, was put into effect to control the remedial soils work. The Remedial Soils Section designed an informal three step procedure to assure NRC approval had been obtained. The first step of the procedure was to review CPCO files for correspondence in which the NRC had already approved the work. The second step was to contact the Midland Project Office in Jackson, MI, to determine whether the Project Office knew of any prior approvals from the NRC. The third step, if either of the two prior steps did not locate the approval, was to telephone LANDSMAN.

Shortly after the issuance of the Midland ASLB Order WHEELER, MURRAY's supervisor, had a discussion with LANDSMAN. During this conversation LANDSMAN decided he would review permits for minor excavations after the work had been done. LANDSMAN's review would be done during his next site visit. It was MURRAY's understanding that major excavations constituted such work as the underpinning of the Service Water Pump Structure.

MURRAY stated he signed the excavation permit for the deep Q duct bank after discussing the excavation with WHEELER. MURRAY believed the deep Q duct bank excavation was within the understanding between WHEELER and LANDSMAN to proceed with minor excavation and having the excavation permits reviewed by LANDSMAN after the excavation had begun.

MURRAY stated he signed the work permit for the fire line relocation excavation after discussing that excavation with John SCHAUB of the Midland Project Office. MURRAY believed the fire line relocation excavation fell within the purview of the agreement with LANDSMAN, as it was a minor excavation.

MURRAY further stated he felt both excavations were within the meaning of the conversation between LANDSMAN and WHEELER to review minor excavation permits after the work had begun. MURRAY stated he felt he had not violated the ASLB Order in signing the permits since this was minor construction and fell within the agreement with LANDSMAN.

MURRAY provided a written statement (Attachment 11).

Interview of CPCO Technical Section Engineer

On January 11, 1983, Donald E. SIBBALD, Technical Section Engineer-Remedial Soils Group, was interviewed by Investigator C. H. WEIL, in the presence of CPCO Attorney J. E. BRUNNER.

SIBBALD advised he signed the work permit for the deep Q duct bank excavation. SIBBALD did not recall coordinating the permit with the NRC for prior approval. SIBBALD thought he may have spoken to WHEELER, his supervisor, to determine if the NRC was contacted. Also SIBBALD thought he may have spoken to SCHAUB at the Midland Project Office about the fire line relocation, but SIBBALD was not certain.

SIBBALD was aware WHEELER and LANDSMAN had agreed NRC approval was not necessary for minor excavations. SIBBALD thought both the excavation beneath the deep Q duct bank and the fire line relocation were minor excavations and would be reviewed by LANDSMAN during a subsequent site visit.

SIBBALD stated he was not aware of LANDSMAN's deep Q duct bank excavation concerns until LANDSMAN wrote a memorandum on August 24, 1982. SIBBALD stated had he known of LANDSMAN's concerns SIBBALD would have contacted LANDSMAN prior to approving the excavation beneath the deep Q duct bank.

SIBBALD declined to provide a written statement. Attachment 13 is The Results of Interview with SIBBALD.

Interview of Midland Project Office Engineer

On January 12, 1983, John R. SCHAUB, Engineer in the Midland Project Office was interviewed by Investigator C. H. WEIL in the presence of J. E. BRUNNER, CPCO Attorney.

On May 20, 1982, SCHAUB attended a meeting at the Midland site with NRC's Darl HOOD, Joseph KANE and LANDSMAN. The deep Q duct bank excavation was discussed at that meeting. Originally CPCO had intended to dig approximately one foot beneath the duct bank, as indicated in Figure 7 of CPCO's January 6, 1982 letter (Attachment 14) to the Office of Nuclear Reactor Regulation (NRR). On May 20, 1982, CPCO presented a new plan to dig under the duct bank approximately ten more feet. SCHAUB recalled most of the discussion concerned the backfill material, whether to use clay or concrete. SCHAUB thought KANE approved the excavation and the use of concrete at CPCO's commercial risk.

SCHAUB next heard of the deep Q duct bank on July 29, 1982, while attending KANE's audit of Bechtel Power Company's Ann Arbor, MI, offices, where SCHAUB received a telephone call from the Midland site. SCHAUB was told LANDSMAN had objected to the excavation beneath the deep Q duct bank. SCHAUB thought LANDSMAN's concern was the backfill material and asked KANE if concrete had been approved as the backfill material. No decision was reached at that time on what material constituted the backfill. SCHAUB believed CPCO had previously received NRR approval of the excavation beneath the duct bank.

SCHAUB declined to provide a written statement. Attachment 15 is The Results of Interview.

On March 23, 1983, James E. BRUNNER, CPCO Attorney, provided a copy (Attachment 16) of the NRR audit of Bechtel Power Company's Ann Arbor, MI, office. The NRR report states in part,

"Design modification at freezewayall crossing with duct banks...

The applicant had previously committed to provide a report addressing the installed surcharge loading program, monitoring results and backfill techniques. The proposed method for backfilling monitoring pits will be provided prior to accomplishing the work. This carryover item from earlier meetings continues as a confirmatory issue."

Interview of ASLB Judges

On March 16, 1983, Administrative Law Judges Charles BECHHOEFFER and Jerry HARBOUR, were telephonically interviewed by Investigator C. H. WEIL. The Judges advised the ASLB had intended the NRC Staff to interpret the April 30, 1982 Order so the ASLB would not become involved in the details of the sub-tasks of the work. The Judges felt this was the NRC Staff's function. They felt the details of the work should be between the NRC staff and CPCO. They wanted the NRC Staff to judge the significance of a particular hole to determine whether the work should be reviewed prior to beginning or after it had begun. They also tried to exempt work that had begun prior to April 30, 1982 from their Order.

Interview of CPCO Midland Project Vice President

On March 22, 1983, James W. Cook, CPCO Vice President for the Midland Project, was interviewed by Investigator C. H. WEIL in the presence of CPCO Attorney J. E. BRUNNER. COOK was requested to explain CPCO's position that the April 30, 1982, ASLB Order had not been violated. (CPCO's position was noted in paragraph 4 of NRC RIII Inspection Report No. 50-329/82-18; 50-330/82-18; Attachment 17 to this Report of Investigation.)

COOK stated he had met with his staff, principally SCHAUB and WHEELER, prior to making the statement that the ASLB Order had not been violated. WHEELER told COOK of an agreement between WHEELER and LANDSMAN to review permits for minor excavations after work had begun. WHEELER explained to COOK that he (WHEELER) felt the deep Q duct bank excavation was within the understanding with LANDSMAN to review permits for minor excavations after the work had begun. Secondly, CPCO believed NRR had received approval for the excavation beneath the duct bank in NRR's May 25, 1982 letter to CPCO (Attachment 4 of this report). Thirdly, none of the CPCO staff attending meetings with the NRC recalled any member of the NRC staff objecting to the excavation beneath the deep Q duct bank. The CPCO staff recalled NRR's Joe KANE had objected to the backfill material, but none recalled an objection to the excavation. Also, the CPCO staff felt the excavation permit system, instituted in response to the ASLB Order, was sufficient to control the work and CPCO could go forward to do the necessary work.

COOK also stated he did not become aware of LANDSMAN's concern with the fire line relocation until the Management Meeting with NRC RIII began on August 11, 1982.

Interview of NRR Midland Project Manager

On the March 30, 1983, Darl HOOD, NRR Licensing Branch No. 4 Midland Project Manager was interviewed by Investigator E. T. PAWLIK.

HOOD stated that initially in a November 12, 1982 letter (Attachment 16) conditional acknowledgement was made by NRR that in order to protect seismic Category 1 duct banks from the possible destructive effects from soil heaving a gap was necessary at the location where the duct banks crossed the freeze wall. In the May 25, 1982 letter there was no intent on the part of the NRR to countermand or change in any way the ASLB Order requirements and procedures which mandated that prior approval by the NRC be obtained for an excavation. HOOD was of the opinion that it should have been quite clear to CPCO as a result of a May 20, 1982 meeting at the Midland facility that the NRR personnel gave no approval for any new excavation and that the procedural requirements outlined in the ASLB Order were the procedures to be followed. HOOD also stated that it was apparent at the meeting that there was a need for further information concerning the excavation issue, and it was his understanding that this information would be provided by the licensee and any existing confusion concerning this issue would be clarified before further excavation work was initiated.

HOOD stated that it was his opinion that the May 20th meeting did not in any way allow for the additional 11' excavation that was ultimately completed before approval from the NRC was granted. HOOD further stated that it was his opinion that as a result of the subject matter discussed during the May 20, 1982 meeting and the content of the May 25, 1982 NRR letter (Attachment 4), there was no conflict between the NRR position and LANDSMAN's position. Additionally, HOOD stated that he did not personally either agree with or directly approve the excavation affecting either the deep Q duct bank or the fire line relocation.

HOOD stated that in July, 1982, he participated in a meeting in Ann Arbor, MI with Bechtel and CPCO personnel. HOOD stated the deep Q duct bank excavation issue was discussed at this meeting and the point was made to the CPCO representatives in attendance that NRR was still looking for further information concerning several issues involving both soil and excavation at the site. HOOD stated that the design modification of the freeze wall crossing at deep Q duct bank was at that time an open confirmatory item, and it remains so as of the date of this interview, March 30, 1983.

Interview of NRR Senior Geotechnical Engineer

On March 30, 1983, Joseph KANE Senior Geotech Engineer in NRR Division of Engineering, Structural and Geotechnical Branch, was interviewed by Investigator E. T. PAWLIK.

KANE recalled that the May 20, 1982 meeting was not a formal meeting which he had been officially invited to attend. Rather it developed out of a site visit of the Advisory Committee on Reactor Safeguards (ACRS). KANE stated that the May 20th meeting may have been the first time that he realized that CPCO may be doing things differently than the way he understood them to be doing things in regard to the deep Q duct bank excavation. He stated he initially expected that the 6" gap beneath the deep Q duct bank, as submitted in the plans, was all the excavation that was to be done. What was brought to his attention however, was a much more elaborate method and it was KANE's understanding that these new plans, which involved an 11' excavation, were to be submitted for review by the NRC representatives prior to the excavation being initiated. It was KANE's opinion that the new excavation which involved an 11' depth, as opposed to the initial plan of a 6" gap beneath the deep Q duct bank, still required NRC clearance and that nothing provided by the NRR in either statements made at meetings or letters submitted by NRR gave any differing information.

KANE further stated that because of the change in plans from the initial submission of a 6" gap to the now projected 11' gap it was obvious to him that no work was to be done until prior approval of this change in plans had been received from the NRC. KANE stated that he neither personally stated nor implied any permission for CPCO to initiate any excavation work concerning either the duct bank or the relocation of the fire line without obtaining prior approval from the NRC. KANE further stated that the meeting held at Ann Arbor, MI in July 1982 identified the deep Q duct bank issue as an outstanding confirmatory item which was awaiting further information before it could be closed out.

STATUS OF INVESTIGATION

The status of this investigation is CLOSED.

Attachments

1. April 30, 1982, Order of the Midland ASLB
2. August 24, 1982, Memorandum from LANDSMAN to SHAFER
3. May 10, 1982, CPCO letter to NRR
4. May 25, 1982, NRR letter to CPCO
5. Bechtel Field Instruction 5.100, Excavation Permit System
6. Excavation Permit No. 46, "Pit Below Deep Q Duct Bank"
7. Excavation Permit No. 48, "Install Temporary Fire Line Reroute"
8. Handwritten Notes made by John FISHER
9. June 4, 1982, CPCO Memorandum for USNRC Exit Meeting of May 21, 1982
10. Statement of Robert M. WHEELER
11. RIII Inspection Report No. 50-329/82-11; 50-330/82-11
12. Statement of Glenn M. MURRAY
13. Results of Interview of Donald E. SIBBALD
14. January 6, 1982, CPCO letter to NRR
15. Results of Interview of John R. SCHAUB
16. November 12, 1982 NRR letter to CPCO
17. RIII Inspection Report No. 50-329/82-18; 50-330/82-18



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

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NOV 24 1981

Docket Nos: 50-329 OM, OL
and 50-330

PRINCIPAL STAFF	
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Mr. J. W. Cook
Vice President
Consumers Power Company
1945 West Parnall Road
Jackson, Michigan 49201

Dear Mr. Cook:

Subject: Staff Concurrence for Construction of Access Shafts and Freeze Wall in Preparation for Underpinning the Auxiliary Building and Feedwater Isolation Valve Pits.

During several meetings with the NRC staff, including more recently those on October 1 and November 4, 1981, members of Consumers Power Company (CPCo) and consultants have described the underpinning planned beneath the electrical penetration areas and the control tower portions of the auxiliary building and beneath the adjacent feedwater isolation valve pits for Midland Plant, Units 1 and 2. These discussions have included the fact that in order to prepare for implementing the underpinning scheme, vertical access shafts on the east and west ends of the auxiliary building and adjacent to each feedwater valve pit and the turbine building must first be constructed from plant grade (elevation 634 feet) down to elevation 609. In addition, a freezeway is necessary to augment the present construction dewatering scheme. The general locations of the access shafts and freezeway are shown on Enclosures 1 and 2. Your letters of October 28 and November 16, 1981 have responded to NRC requests for additional information and have requested staff concurrence to proceed with construction of the access shafts and freezeway.

Our review recognizes that the vertical portion of the access shaft will not undermine any existing structure. The shafts and the freezeway can be abandoned at any time and will be backfilled with concrete or soil upon completion of the underpinning activity. Accordingly, this activity does not represent an irreversible commitment. It also has no effect on any other remedial action that may be required as a result of the staff's continuing review of subsequent phases of the underpinning scheme or as a result of the staff's OL review or the OM-OL hearing. Our review further recognizes the commitment of your staff that Region III personnel will be notified prior to drilling near seismic Category I underground utilities and structures.

In view of the above, the NRC staff concurs with your plans to begin construction of the vertical access shaft down to elevation 609 and installation of the freeze wall hardware.

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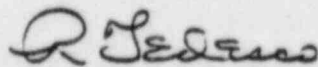
~~III~~

Mr. J. W. Cook

- 2 -

A later phase of your underpinning work is understood to involve excavation beneath the valve pit structures, and extending the access shaft deeper to permit excavation along the turbine building for eventual access beneath the auxiliary building. However, this later phase requires submittal of further information for staff review and approval and our above concurrence does not authorize excavation directly beneath any structure. Similarly, our review of the effects of operation of the freezeway involves submittal of additional information (e.g., potential heave and resettlement) and our above concurrence is limited to installation of the freezeway, and does not include its activation. The additional information associated with these later phases will be discussed by the staff during the OM-OL hearing session beginning December 1981.

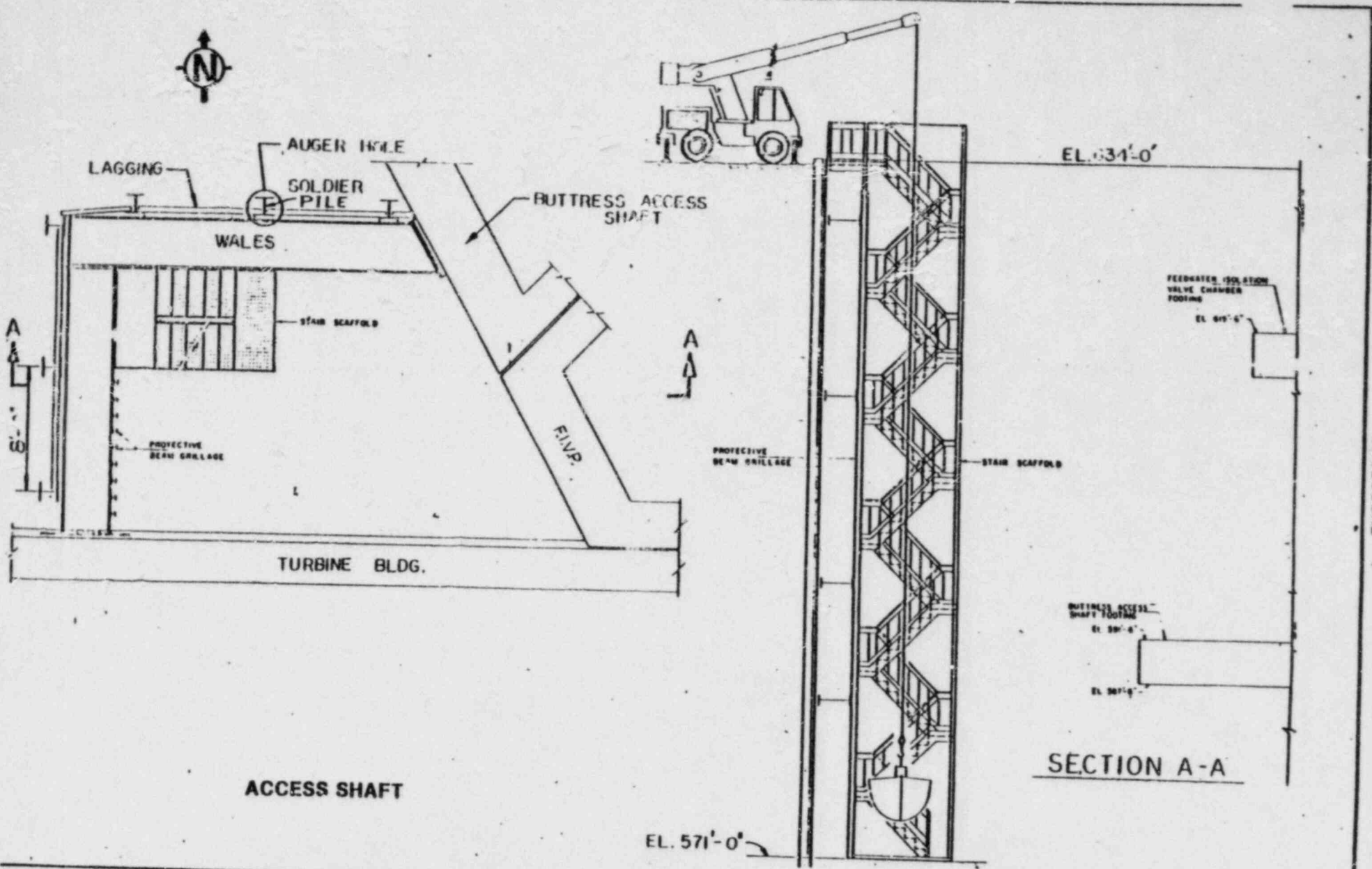
Sincerely,



Robert L. Tedesco, Assistant Director
for Licensing
Division of Licensing

Enclosure(s):
As stated

cc: See next page



ACCESS SHAFT

FIG AUX-29

ENCLOSURE 2

