102 per A. Bood.

March 12, 1982 2:08 p.m.

Conference telephone call between Bechtel/Consumers and NRC.

Call initiated by Don Horn/Al Boos to Dr. Ross Landsman, NRC, Region 3.

In attendance:

BECHTEL/CPCo

NRC-Region III -Chicago

Ross Landsman Mr. Boyd

Al Boos J. Fisher R. Cook (NRC - Site) D. Horn J. Schaub Jim Moore Ben Marguglio J. Simpson Bob Sevo Dave Ronk Gary Rogers Ray Oberleitner (Mergentime) Ken Vanderjack

Boos: Hello, Ross, this is Al Boos, with Don Horn.

Who is there with you?

Ross: Landsman and Boyd.

Boos: Who else?

BoyD Rese: That is it.

Were you able to get through to the NRR or not? Couldn't raise anybody - will handle without hem.

Boos: (Brief introductory remark) With respect to remedial soils work, it was the staff's position that all items were Q unless applicant could demonstrate that certain activities should be non-Q data. When I came back to Michigan, we have a weekly coordination meeting and one of the first things we did this morning was to draw up a list of those items which either have been completed or in process or are proposed which we feel can, in fact, be treated as non-O items. Since we are working under the B408170126 840718 PDR FOIA RICE84-96 PDR business as usual concept of you making audits, we felt it was prudent to review with you this list prior to making inspection so that we would have a very clear dialogue in terms of those items remaining Q, primarily because in some respects we elect to bid it may not be physically possible to replace that item - like removing wood for drift. Since we don't want to be cited, we are going to attempt to identify items we feel are non-Q. We feel it is essentially a complete list. May be a need from time to time to offer other items. We will try to do it before we undertake the work. I will ask Don to take us through this.

Boos: Access shafts below 609 - drifts, the piers and instrumentation. (Ron Cook has a copy of it. If necessary for interpretation, he can help me).

1. Access shafts below 609 - Soldier Piles.

It may help you if you have a clean sheet of paper to put down four column headings. I will try and summarize. With respect to soldier piles, we have procured those piles and have installed them as non-Q as you are aware. With respect to access shafts below 609. In this case, in general, other than just access shafts at 609, we feel that the purchase of tools and equipment like torque wrenches, jacks, gauges and threading machines should be non-Q. Our rationale is that there is either provision for calibration or an end inspection of the fabrication, like the reinforcing steel that is threaded by the threading machine. Again, tools and equipment is intended to be a generic comment. Question: Is this construction equipment?

Answer: Yes, tools and equipment.

- Sock: (This is being transcribed for purposes of preparing a telephone summary. QA required it.)
 - Access shafts below 609. Purchaseof steel and logging wood legging and I believe we talked about that the other day in Bethesda.
 - J. Fisher: To differentiate steel shape = whalers in wood
 - Ross: When we talked An the Washington, we were talking about the no certs.
 - Al: That is what makes it a Q purchase. We would not be buying this with mill certs because this steel doesn't stay in - it is temporary and non permanent. Standard manufactured item.
 - Ross: We are just talking about the mill cert?

Al: We are not talking about buying it Q.

Cook: The tons of concrete that you pour around here - did you have mill certs on the wood forms you used before? Why on this particular job? Isn't wood begoing steel shapes?

Al: That is right - We didn't think it needs to be bought Q. Cook: You didn't talk about this before.

Al: This is a whole new thing.

Cook: NRC - what is the meaning of all this?

Al: We were directed that everything was to be Q unless the applicant could demonstrate that item could be classified as non-Q - we feel that it is imperative for us to check off with you even though you may say thay need not be purchased Q. We want to leave a trail that is crystal clear.

Cook: The point is that historically we never have approved anything. Our function is that you are obligated to assure the world that you have done all things appropriate and have invoked QA. We cannot either agree or disagree.

A1: I am not asking for you - I am making a statement of our policy in advance. We will know in an audit what our position is. If he is not in agreement with that position it is in our mutual interests for us to know now from a cost, schedule, quality and personnel safety standpoint.

Cook: Go ahead and revert back to the fact that you poured tons of concrete.

- Fisher: We are doing this because of what you told us the other day.
- Last item under access shafts below 609 is purchase of A1 : rock bolts.

Ross: Which rock bolts?

A1:

Rock bolts Turbine Building and buttress access shaft. Again, purchase \wedge installation would be handled as Q. ATY In all of these cases, I have talked about you will note I have talked about only procurement of material with exception of soldier piles. Tools and equipment, etc. Installation would be Q. Ross: Continue.

A1: New subject - drifts. We are planning to procure the material for the steel sheets which are basically the box-shaped frames that accept logging in the drift as non-Q. Fabrication of those steel sheets would be Q and installation. Al:

Ross:

The next item - the procurement of the wood legging and wood wedges for the drifts would also be non-Q. Procurement. Procurement of the back packing material for the drifts would be non-Q. And as a 4th item, the procurement of the rock and earth anchors would be non-Q. Those are the sets of items under the classification of drifts. Under piers - - -

Don has asked me to again reiterate that fabrication and installation of the drifts classification items would be Q. Under classification of piers, Ross, you may be aware that there is Ethifoam to be put behind metal leggings as back packing. May be gluing Ethifoam to steel . We will propose to procure that glue as a non-Q commodity. Verification that is in place would be a Q-listed activity.' That is the only entry I have under piers.

Last item is instrumentation. We are talking about the settlement monitoring instrumentation, pier monitoring instrumentation, etc.

Our position here is that the raceway, the wire and the brackets that would accept the instrumentation would be procured and installed as non-Q. The checkout of the system and the making of the reading would be Q. What would you say about the instrumentation in that area?

Al: Instrumentation has been purchased Q. The instrumentation system is in a data room - it has been procured and installed with environmental controls as non-Q.

- The last item which is essentially a repeat of that above under access shafts Hauges, backup gauges, have been procured as non-Q but would be calibrated under a Q program. These are existing dial gauges. Our instrumentation is essentially well under way. Wiring has been pulled - raceway has been installed, etc. Those are the only comments I have.
- Ross: Okay. Let us talk here a minute and we will get back with you in just a second.

B. Marguglio: Didn't those dotted lines mean all non Q?

- Al: Yes, across the board.
- BM: Did that come across in the conversation?
- Al: I will reiterate it. It becomes Q at the checkout of the system.
- Cook: I am here.

A1:

- Ross: Feel free to make your own comment.
- Boyd: We would like to digest this list and get back with your designated person on Monday. We'd like to sit down and look it over and get back with you, but not to say that we approve or disapprove. If we have any problems or = does not constitute approval - it means we don't have any problems with what is here.
- Al: We recognize that you are not going to sign anything as co-approvers.
- Boyd: But we can look over and make judgments whether we have any problems and identify anything that does give us problems. Who should we get back with on Monday?

Al: Don Horn.

Boyd: Okay.

Boyd: Ron, do you have any problems with that?

- Cook: I think that can be quite livable. We might appear not to have any problems but later on we get into construction and problem is created. I don't want to have relinquished our right to enforcement in that area.
- Ross: That is exactly why we don't go into approval process. My judgment is there will be very fee that will happen that way but we want the door open.

Ross: Okay.

- Al: Very good. The rest of us in the room will wait to hear from you and your results on Monday.
- BM: I have a question. Will it be both of you gentlemen calling Don Horn Monday?
- Boyd: Ron Cook and Ross and myself will get together and talk one of us will make the call. We will get back with you on Monday with our findings.
- Al: To clarify one point, to make sure I didn't mislead the people in Chicago - with respect to the raceway material - the wire, the fabrication of brackets that instrumentation, and termination of wire that we are talking about that, with respect to procurement through installation.
- Boyd: Could you give Ron Cook a copy of that so he can fax it to us? Cook: I will try to fax it to you right away.

Boyd: I think that is important.

Al: Thank you very much.

load to believe all or most of instrumentation implace

Fragmented activity Schedule

'ist

boring denatoring wells access shaft

Marchiz phone call list BECHTEL
1-312-932-2665 OR 2692 CONFIRM - 1-312-932-2659 ATTENTION: DR. R. LANDSMAN
CITY: GLEN ELLYN 12 FROM: RON COOK
NUMBER OF PAGES:
DATE: MARCH 12, E2 TIME: 3:12 PM
SHOULD THIS COPY BE RETURNED TO YOU? VES EX 538

.

Procurement of Material	Drawing and Specification	Procedure	Physical 4
-Access Shafts Below 609'		Sec. 1	
Soldier Pile			I
Steel, and woop lagging (stapes). w. 4.	ines. Calibration o end inspection is Q.		
Rock Bolts (Williers). Willight / E. it. Procession	c:+-{7		
Steel sets naterial (ne for access prift. (of fabrication will be C.)	a-s) site		
wood layging for access orift and wedges.			
Back packing naterial.			
* Reck and earth anchors.			
riers .		,	
Glue, for ethefoar bent metal lagging.	nd		
r Instrumentation			
Raceway material	••••••		:
Wire Wire			
Steel brackets fabricat [Q material]	ion		
LIPA .	Terrination	Termination	Terriration
	<	Check out is Q	
Data room and HVAC to m tain constant temperatu	re.		
Dial gages [Non-0]			

ŝ

19.4

Historical	Completed Items	Inprocess Items	
BWST		SWPS	
Control Survey		Dien seared	
Settlement test		bench marks and	
during hydro. 1		Attached bracket	
		and dial o soor i	
Stress relief		and a at grades.	
on detensioning i		Friday State	
of bolts?		installation of l	
(Lift off icars)		ter orar	
		turting and	
		Strate states	
	영양 영화 가격 가슴 것이 같이 같이 같이 같이 같이 많이 많이 많이 했다.	(stressing D)	
		(*************************************	
Auxiliary Sidg. 1			
Fabrication end (
instal ation of			
tercorary	4		
oftensions.			
repriseior and			
Installation of	· · · · · · · · · · · · · · · · · · ·		
te porary			
support of risp.	1		
udorses and	1		
In ili-ier			
All data			
collection and			
dana Non-O			
1 1-10 in 1		1	

A decess shaft - Soldier piles - non Q already installed purchase 3 steel & wood lagging ONLY (1) rock bolts that secure walers to Wall B Drifts O steel sets non Q Purchase only Dwood lagging (3) back patring of wood layging) (1) rock anchors c frens 1) Form glue to secure for in to legging purchase only p instrumatation 1) race way, wire of brachets" purchase of installation non-R though it was chectart is Q

Gdata voom non-cua (2) dial gazes parchased non-QAAmes

ONLY TO COMMENT - DOES NOT CONSTITUE AN APPPOVAL

DON HORN 517-631-8650 EX 277

Supports of FNIV Pitt

1



attendeer 3/10/82

Rans Part & Itrod EG AUF A.J. BOOS J.A. MOONEY Robon W HUSTON R B Landsman T G ilvay R. J. Cook D.M. BUDZIK Gamer Brume URC Hirzel Joseph D. Kane DONALD E. HORN FRANK RINALDI FREDERICK WILLIAMS Heal Swanberg Frank

Organytin BAY/NRR La VINCR BECHTEL CPCO CPCO C PCO NRC-KTT NRR GHB. NRC. RESIDENT INSTECTOR CFCC CPC CPGo NRC NRR DE HGEB CPCO - MPQAD NRE /NRR/DE/SEB IS HAM, LINCOLN + BEALE Bechte/ NAR

QUALITY ASSURANCE PROGRAM POLICY

Page x Revision 11 Date 11/18/81

LIST OF DEFINITIONS

Safety-Related - The term applied to:

TITSUITER'S PRES

Structures, systems, components, materials, services or Operational Safety Actions or Activities named on the Q-List as necessary to assure:

- 1. The integrity of the reactor coolant pressure boundary.
- 2. The capability to shut down the reactor and maintain it in a safe condition.
- The capability to prevent or mitigate the consequences of an accident which could result in potential off-site exposures to individuals in excess of exposures specified in 10 CFR 100.
- The operation of the facility within Technical Specifications limits and Nuclear Regulatory Requirements.

Secondary Standard - An item of measuring and test equipment (M&TE) used to calibrate other M&TE. They are periodically calibrated using Reference Standards and reserved for use in the calibration of working plant or field M&TE.

Section - A subdivision of a department, usually made along lines of a technical specialty; eg, Nuclear Licensing, Health Physics, Nuclear Fuel, etc.

Services - Work performed by an organization or department having no deliverable hardware type end item other than the results of construction, modifications, repairs, inspections, audits, reviews, etc.

Source Inspection - Inspection of an item at a Supplier's facility during its manufacture, or at completion of manufacture, to verify implementation of the procurement requirements.

Spare Part - An item available for replacement for an item in use.

Special Nuclear Material (SNM) -

- Plutonium, Uranium 233; uranium enriched in the Isotope 233 or in the Isotope 235; and any other material which the NRC, pursuant to the provisions of Section 51 of the Atomic Energy Act of 1954 as amended, determines to be special nuclear material, but does not include source material; or
- Any material artificially enriched by any of the foregoing, but does not include source material.

Special Process - Those metallurgical, chemical, or other processes where assurance of the process activity is dependent on the use of qualified procedures, personnel, or equipment; and where assurance of quality cannot be by direct inspection of the in-process activity or final product. These include, but are not limited to, welding, heat-treating, NDE and environmental testing of the work process. regulations, guidelines, or other factors separate and distinct from the components of the system itself. The system is considered as a unit, with boundaries as defined by Regulatory Guide 1.70 and must meet specific requirements. The design bases describe all essential characteristics of the system with sufficient clarity so that an experienced engineer, using these design bases and material referenced in the design bases, can understand the functions of the system with respect to the rest of the plant. Items implicit to contemporary design (e.g., use of the English system of weights and measures or the exercise of good engineering practice) are not specified.

1.1.2.2.1 Safety Design Bases

...

Safety design bases directly establish or increase nuclear safety. Safety design bases provide for or assure the following:

- a. The integrity of the reactor coolant pressure boundary
- b. The capability to shut down the reactor and maintain it in a safe shutdown condition
- c. The capability to prevent or mitigate the consequences of accidents that could result in potential offsite exposures comparable to the guideline exposures of 10 CFR 100
- d. The accomplishment of specific structure, system, or component requirements which are important to safety

The control room operator action is considered as one of the fundamental means of achieving these criteria.

Safety-related structures, systems, and components important to safety are the portions of systems which are indispensable to nuclear safety. Items which are associated with safety-related equipment but which do not perform a nuclear safety function are not safety-related.

Redundancy requirements and system performance conditions are considered a feature of the equipment's capability to shut down the reactor safely or to prevent or mitigate accidents.

1.1.2.2.2 Power Generation Design Bases

Power generation design bases are those design bases which are not related to nuclear plant safety. They need not relate directly to the generation of power; however, they relate at least indirectly to power generation in the sense that all station requirements which are not imposed for safety reasons support the major function of the station as a whole; i.e., the generation of electrical power and process steam. An example of

1.1-4

MIDLAND 182-FSAR

a power generation design basis is the requirement to provide domestic water for plant personnel.

· · ·

....

£.

Det 1 Jan ? lette Safety Related Activities access shatt duit tuda turkine digging sharts Ogeneral aplan of dux bailding " parmanat" supports Q "Homperary" supports not Q Manifusing Q E effects et nor a on a staff is a familier ave a because port of i.e. v opports under control term ave a because port of underprise my A * pestion 2 mg guile 1.29 - JONIN FOR DEXON * QA list > no works etc. -NOT LOUTE IN IT'S INTIRETY non we let you do it once (15th SUMMARY . DE Butting according to drawings procedures in what it not rlace





e d



UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20055

MAR 1 2 1982

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

APPLICANT: Consumers Power Company

FACILITY: Midland Plant, Units 1 and 2

SUBJECT: SUMMARY OF MARCH 10, 1982 MEETING CONCERNING QUALITY ASSURANCE TO BE APPLIED TO REMEDIAL FOUNDATION WORK

On March 10, 1982, the NRC Staff met in Bethesda, Maryland with Consumers Power Company and Bechtel Power Corporation to discuss the application of quality assurance to remedial foundation work. Specifically, applicability to work related to underpinning of the electrical penetration areas of the Auxiliary Building and of the Service Water Pump Structure and to construction of the new Borated Water Storage Tank foundation ring was discussed. A list of meeting attendees is attached as Enclosure 1. Enclosure 2 is a compilation of the materials handed out and discussed at this meeting.

SUMMARY

A draft of the Quality Plan for Underpinning Activities was submitted for NRC review by Consumers Power Company letter dated Jamuary 7, 1982. During the course of its review, the Staff had requested to be provided with a listing of items and activities to which the plan would not apply (i.e., "non-Q" activities). The meeting was held to allow the Applicant and his Architect-Engineer to discuss in detail the applicability of this plan.

The Applicant informed the Staff that the Quality Plan has recently been finalized as MPQP-1. It was transmitted by Bechtel by CPCo (WRBird) letter dated March 3, 1982 (see Enclosure 2).

The Staff noted that the programmatic aspects of the quality plan submitted January 7 sppeared to be in full compliance with Appendix B of 10CFR50 and are acceptable. Issuance of formal acceptance is avaiting the discussion of the extent of the program's applicability and specifically the items which it will not cover. Due to the nature of this work, the Staff's initial consideration is that essentially all construction activities related to the remedial work should fall under this program.

CPCo and Bechtel sought to limit full program applicability to those items which they considered safety-related. This term is defined in the accepted CPCo Quality Assurance Topical Report and in section 1.1.2.2.1 of the FS/ (see Enclosure 2). From a technical design viewpoint, Bechtel proposed the following clarifications as the logical application of these definitions to the remedial work:

1. Only permanent supports/structures need be Q listed.

٤

MAR 2 5 1982

2. Temporary (i.e., construction) supports need not be Q.

8204290107

Meeting Summary Midland Plant

1- - 11

5. Support of non-Q structures (e.g., turbine building) is inherently non-Q.

2

- 4. Proceedures for manipulation of a safety structure (e.g., jacking) are Q when the manipulations produce final input loads. For example, jacking from a tempotary support is non-Q, not because it is not important but hecause it is not relied on for the safety of the structure following fuel load when the bealth and safety of the public could potentially be at risk.
- A maniforing program to determine the effect on safety-related structures of all work, including temporary (i.e., son-Q) loads will be in place. The monitoring program will be Q.
- 5. Non safety-related buildings and supports which can affect safety-related structure are non-Q. Housever, the evaluation of the effect of such structures on safety structures is Q.
- 7. Given the above points, the conclusion must be drawn that installation of temporary underplaning where it will ultimately become a part of the permanent underplaning (i.e., under the control tower) is Q. Temporary support of the electrical penetration areas, not to be a part of the final support, is non-Q, however the evaluation of its effect on the structure is

CPCs noted that the key point is the above items is that adverse impact on a structure from the temporary work has a potential impact on plant licensability, but not on health and safety. CPCs acknowledged, however, that quality control on some work which would not be defined as Q is accordance with the above is desirable considering the sature and extent of this work. CPCs therefore proposed a new designation of "QA". Items and activities so designated would be treasted by CPCs, Bechtel, and their construction contractors exactly as Q items except for reportability to the SMC. A portion of the Acxiliary Building remotruction sequence drawing designating those plans to be Q and those to be QA was discussed (see Enclosure 2).

There are certain activities related to the underpinning work which would fall in meicher of these categories. An example discussed at some length was excavation of the drift (commel) under the turbine building (non-Q). Although final conservation drawings, preparation of which would involve a final classification, are not complete, the Applicant agreed this work would probably fall into meither category. The Staff noted that failure to properly install the associated bracing could have an immediate effect on the Auxiliary Building. The Applicant contended that the monitoring program for the Auxiliary Building, which is accorded Q status, would detect such an effect.

During the discussion, the Applicant expressed concern that a Q-listing automatically required the imposition of mamerous difficult requirements which sight not relate to the real concern. The Staff disagreed, noting that 10CPR50 Appendix 8 provides that QA shall be implemented to the extent commensurate with the imput on selety; for example, while it does not matter what implement is used to remove soil when digging an access shaft, the location, size, and depth of the shuft are important. Meeting Summary Midland Plant

Following a private caucus, the Staff responded to the applicant's proposals as follows:

3

The Staff did not accept the concept of the "QA" Classification. The Staff considers that all activities beginning with phase 2 work should be Q Trated except on very specific items which can be shown on a specific basis to justify non-Q treatment. NRR concurrence in this justification must be obtained prior to conducting any work efforts completely outside the quality plan.

The Region will continue the level of involvement of the recent past. Every drawing and specification does not require Region III concurrence before use, although they must be completed and available prior to commencing the work they cover. In preparing and approving these documents, individual detailed activities which require or do not require specific QA controls shall be specified in accordance with the quality plan and considering the flexibility inherent in IOCFR50 Appendix B. The Staff rejects the philosophy of reliance on the monitoring program as the sole Q protection for safety structures. The process controls which preclude the attainment of undesirable effects which the monitoring program.

With respect to the items of design philosophy enumerated above, the Staff disagrees with numbers 1, 2, 3 and 7. The Staff disagrees with the limitation of number 4 to final input loads. The Staff agrees that the monitoring program of number 5 must be Q but rejects the concept of this as the sole Q protection for safety-related structures. The Staff disagrees with the aspects of number 6 which classify non safety-related buildings and supports as non-Q but agrees the evaluation of effects must be Q as well as related construction and design work.

It was agreed at the conclusion of the meeting that the applicant must submit a letter, prior to beginning phase 2 work, which provides the information agreed to in the March 8, 1982 telephone call with Mr. J. D. Kane of the Staff (see Enclosure 2). The NRC will take specific action on this submittal prior to the start of phase 2 work.

DARL HCCT

68 ...

Darl S. Hood, Project Manager Licensing Branch No. 4 Division of Licensing

Enclosures: As Stated

cc: See Next Page

17600/183 201

AUG 2 0 1982

MEMORANDUM FOR: James A. Fitzgerald, Acting Director, Office of Investigations

FROM: James G. Keppler, Regional Administrator, Region III

SUBJECT: MIDLAND-REQUEST FOR INVESTIGATION

During an inspection of remedial soils activities at the Hidland site, Dr. Ross Landsman of the Region III Midland Section identified two instances of apparent violation of the April 30, 1982 ASLE Order. Dr. Landsman contends that the licensee, in direct violation of the Board Order, excavated below the deep "Q" duct bank and initiated fireline relocation activities in "Q" soils without prior NRC authorization. A copy of the memo addressing his findings is attached.

A management meeting was held on August 11, 1982 at the Midland Site. The licensee's position, as stated during this meeting, was that the ASLE Order was not violated. The licensee contends that their actions, in both instances, were based on prior understandings of the NRC requirements pertaining to the ASLE Order and prior approvals granted by the NRR staff.

Because of our concern with communications misunderstandings at the Midland project and the seriousness of this matter, Region III requests OI investigate this matter as expeditiously as possible. NRC personnel familiar with this matter include Dr. Ross Landsman, Ron Gardner of Region III and D. Hood, J. Kane of NRR. Region III will, of course, provide technical assistance as required.

We appreciate your cooperation in this matter and will be glad to discuss any questions you may have.

> Original signed by A. Bert Davis

James G. Keppler Regional Administrator

Attachment: As Stated								
OFFICE	RIII	RHI	303 160 R 111/	R III	RII	RILI		
SURNAME DATE	Lafidaman/1c 8/1782	Ul fel	Shafer	Warnick ?/17/22	Davis S/18	forkeppler P/18		

J. A. Fitzgerald

5

- 2 -

cc w/encl: DMB/Document Control Desk (RIDS) Resident Inspector, RIII The Honorable Charles Bechhoefer, ASLB The Honorable Jerry Harbour, ASLB The Honorable Frederick 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.) R. F. Warnick W. D. Shafer R. N. Gardner R. B. Landsman



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

AUG 2 4 1982

MEMORANDUM FOR: W. D. Shafer, Chief, Midland Section

FROM: R. B. Landsman, Soil Specialist

SUBJECT: VIOLATION OF ASLB ORDER OF APRIL 30, 1982

When Darl Hood and Joe Kane were in Midland for an ACRS hearing, I asked for a meeting to be held on site between NRR, Bechtel, the licensee and myself. The meeting took place on a Thursday afternoon in the Remedial Soils Trailer (May 20, 1982). The purpose of the meeting was to discuss numerous concerns that I had about ongoing work and future work.

One of the concerns discussed was a monitoring pit for what has come to be known as the deep "Q" duct bank. During that meeting both NRR and I expressed our concerns that what the licensee was planning was not approved, that is: to excavate below the duct bank. NRR only approved an excavation down to a duct bank approximately 22 feet deep. This is documented in an NRC Tedesco to Cook letter dated February 12, 1982, which references a CPCo Mooney to Denton letter dated January 6, 1982.

Since the licensee usually does not know what is in the ground or where it is, as usual the 22 foot duck bank was found at approximately 35 feet. It also was not in the right location as evidenced by the monitoring pit sheet piling hitting one side of the duct. In addition, while drilling a nearby dewatering well, they inadvertently drilled into the duct bank, emptying the well drilling fluid into the turbine building through the duct.

I had no problem with the licensee taking the excavation pit down to 35 feet instead of the approved 22 feet, since the methodology of the approved excavation remained the same. NRR and I did have a problem with the licensee wanting to excavate below the duct bank to impervious clay in order to seal off the water flow, without first informing NRR of their plans and obtaining their prior approval.

All of the above was discussed during the meeting. The licensee was informed that they could not excavate below the deep "Q" duct bank. The licensee indicated that they would submit something formal to NRR for approval.

302080312

W. D. Shafer

The following day, I warned them during the normal exit meeting and again during the summary at the end of that meeting that they did not have prior NRR approval. I asked if everyone understood what I was saying and they acknowledged.

The following week, during my inspection to allow the licensee to activate the freeze-wall, I warned them again that they could not dig below the deep "Q" duct bank because they did not have prior NRR approval.

Subsequently, after the activation of the freeze-wall, the licensee apparently decided that they had to seal off the water flow beneath the duct bank and proceeded to dig below the duct bank without NRR approval. I'm not sure when excavation began, but I was on site July 28 when I discovered the excavation in progress. The licensee, when informed of my concern, issued a Stop Work Order on July 29, 1982. I wondered why they were so agreeable until I found out that they already had the excavation down to where they wanted it (the clay).

I informed the licensee during my exit on July 30, 1982 that they were in direct violation of the Board Order and their Construction Permit. To make matters worse, the licensee during the exit, said that they discussed this with Messrs. Heod and Kane in Ann Arbor earlier that morning and had received "Approval concerning the technical adequacy" for what they were doing. I informed the licensee that they missed the point (basis of concern). My concern dealt not with the technical adequacy of what they were doing, but rather with their ASLB order requirement to notify and receive prior staff approval before proceeding below the duct bank. Subsequently, Mr. Kane indicated to me that they never even talked to him about this. Mr. Hood indicated that they talked to him about something concerning the deep "Q" duct bank, but he in no way had given approval.

Subsequent to my leaving the site, the licensee began what I consider to be another unapproved excavation in "Q" soils. This excavation, which involves the relocation of a fire line was discovered on August 4, 1982, during my next inspection. This excavation is along side the service water pump structure. I have not had time to look into this matter to better define the details, but as pointed out to you and Darl Hood, they have undermined a duct bank, an unidentified pipe thrust block, a seperar to be along side a safety-related duct bank.

Ross Landsman

Ross Landsman, Soils Specialist

cc: R. F. Warnick