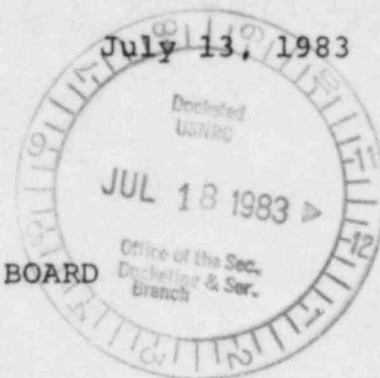


UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD



In the Matter of)	
)	
COMMONWEALTH EDISON COMPANY)	Docket Nos. 50-454-OL
)	50-455-OL
(Byron Station, Units 1)	
and 2))	

MEMORANDUM OF COMMONWEALTH EDISON COMPANY
IN OPPOSITION TO INTERVENORS' MOTION
TO SUPPLEMENT QA/QC RECORD
REGARDING PREOPERATIONAL TESTING

This is the second in what promises to be a series of motions by the Rockford League of Women Voters and DAARE/SAFE ("Intervenors") to reopen the record in this proceeding. The first motion concerned the testimony of John Hughes. Another is promised when Intervenors' counsel receives an inspection report regarding the Quad Cities Station (Letter, Jane M. Whicher to the Licensing Board, June 29, 1983). While Applicant recognizes that each motion must be evaluated on its merits, it is clear that the potential exists for diversion of the resources of the Board and the parties in responding to such motions. This is particularly true given Applicant's extensive nuclear power plant commitments, comprising four operating nuclear power plants and two under construction. The issuance

of inspection reports and other documents by the NRC's Division of Inspection and Enforcement can be expected on a routine basis for the foreseeable future.

Applicant respectfully requests the Board to deny this motion. In addition, we believe the Board should also provide some further guidance to the parties so that the filing of motions such as this one, dealing with matters that are tangential and immaterial to the Quality Assurance issues actually litigated before this Board may be inhibited. As set out below, the issue of preoperational testing was referred to in passing only by the Staff and a full-fledged evidentiary presentation on that issue is equivalent to introducing an entire new subject into the proceeding. Moreover, the specific items referred to in the inspection reports do not constitute items of safety significance within the meaning of this Board's May 12, 1983 order nor does consideration of these inspection reports by the Board have the potential to affect the result.^{1/}

^{1/} Applicant does not concede that the motion is timely. The underlying inspection reports regarding preoperational testing were apparently received by Intervenor about a month prior to the filing of the Motion. These reports contain language comparable to that found in the June 10 memorandum of the Enforcement Conference on this subject. Given the advanced stage of this proceeding, it would seem that a more prompt filing is required under the Vermont Yankee case (Vermont Yankee Nuclear Power Corporation (Vermont Yankee Nuclear Power Station) 6 AEC 520, 523, n.12 (1973).

- A. The conduct of preoperational testing is not fairly comprised within the scope of Intervenor's Contention 1A which deals with quality assurance.

In order to place Intervenor's present motion in context, it should be noted that the inspection reports and memorandum of an enforcement conference attached to the motion do not deal with any deficiencies in Applicant's Quality Assurance Program, but rather with apparent deficiencies in the implementation of the preoperational testing program. While the items of noncompliance discussed in the inspection reports reference one of the criteria found in 10 CFR 50, App. B, the details of implementation of preoperational testing were not litigated by the parties in any meaningful sense during the course of the evidentiary hearings.

A review of the history of Contention 1A reveals that Intervenor made only a passing reference to preoperational testing in their answers to interrogatories. The Rockford League of Women Voters' answer to Applicant's first set of written interrogatories identified two NRC inspection reports which refer to preoperational test procedures. (Rockford League of Women Voters Answer to Applicant's Interrogatory 1(a) on Contention 1A dated July 6, 1982.) One of the Inspection Reports, 50-454/82-06 merely referred to certain preoperational testing procedures as an open item. The other Inspection Report 50-454/81-11 identified two procedural problems with the conduct of specific preoperational tests, as well as a proofreading

error in the Startup Manual. A Severity Level V and VI item of non-compliance was assessed.

Given the insignificance of these items, Applicant did not submit any direct testimony addressing the subject of preoperational testing. The Staff did so in its prepared direct testimony (Forney, NRC Staff Prepared Testimony at pp. 10-11, (Tr. 3586)). Moreover, contrary to the citation to the Transcript found at page 3 of Intervenor's Motion, there is no discussion of preoperational testing at p. 3569. Indeed, the only reference to preoperational testing is found at Transcript pp. 3808-12. At those pages, Staff witness Forney referred to preoperational testing as the reason for increased NRC inspection activities at Byron and a consequent greater number of items of noncompliance. There is simply no discussion of the substance of the preoperational testing program in the evidentiary record to date.

Intervenors apparently wish to supplement the record with the attachments to the Motion. Yet, such a procedure would be the basis for further evidentiary submittals by the parties. At a bare minimum, Applicant's responses to the inspection reports must also be received. The result will be an untoward expansion of the extensive Quality Assurance record, which so far has focused on matters far removed from the subject of preoperational testing. Intervenor's motion is tantamount to introducing a new contention long after the contentions were

filed and the substantial matters in controversy identified and litigated.

- B. The preoperational testing items referred to in Intervenor's motions are not of safety significance and will not change the outcome of this proceeding.

1. Contrary to Intervenor's characterization of the inspection reports attached to the Motion as disclosing "severe deficiencies in the preoperational testing program" (Motion p. 3), each inspection report identifies one item of noncompliance with a Severity Level IV designation. Applicant, of course, takes these items of noncompliance seriously. But they hardly rise to the level of safety significance, particularly when Inspection Report 50-454/83-18 identifies the conduct of only 1 of 5 preoperational tests as leading to an item of noncompliance. Inspection Report 50-454/83-17 covers the same time period and identifies another item of noncompliance with respect to the same preoperational test asserted to be deficient in Inspection Report 50-454/83-18. Inspection Report 50-454/83-17 identifies no discrepancies with respect to 4 other preoperational tests. Unlike Mr. Hughes' assertions of fraudulent quality assurance inspection practices (See Memorandum and Order Setting Special Deposition Session, p. 4 dated May 12, 1983), the intensified review of preoperational testing and a concomitant increase in identified items of noncompliance is an expected consequence as a nuclear power plant progresses from construction towards fuel load. The NRC Staff has so testified specifically with

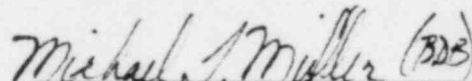
respect to the Byron Station. (See e.g. Tr. pp. 3808-3810).

2. It is also apparent that any consideration of this issue by the Licensing Board is extremely unlikely to change the result. As noted above, preoperational testing is but one insignificant portion of the present Quality Assurance contention and the evidentiary record developed to date. In deciding whether Applicant has met its burden of proof on Contention 1A, the Board will be considering evidence on such matters as construction quality assurance practices for Hatfield Electric Company, batch plant operations by Blount Brothers Construction Co., an evaluation of an extensive inspection performed in the Spring of 1982 by the NRC Staff and the manner in which QC inspectors have been trained and certified. (See Memorandum and Order dated June 21, 1983). To suggest that the details surrounding two inspection reports which resulted in two Severity Level IV items of noncompliance is going to alter the outcome of the proceeding is unreasonable. In view of the extent of the evidence adduced on Contention 1A so far, it is extremely unlikely that these preoperational testing matters will themselves add to the existing evidence so as to persuade the Licensing Board to find in Intervenor's favor on Contention 1A. Moreover, in view of the attention to this matter by the NRC Staff, as evidenced by the enforcement conference, imposition of license conditions by the Board would be an untimely and relatively ineffective technique

for rectifying any problems with preoperational testing. More importantly, as demonstrated by the attachments to the affidavit of Tom Tramm which is appended to this Memorandum as Exhibit A, the Applicant has implemented extensive corrective action in a timely manner.

Conclusion

For all the foregoing reasons, Intervenor's Motion should be denied.


Michael I. Miller
One of the Attorneys for
Commonwealth Edison Company

Isham, Lincoln & Beale
3 First National Plaza
Chicago, Illinois 60602
(312) 558 7500
Dated: July 13, 1983

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	
)	
COMMONWEALTH EDISON COMPANY)	Docket Nos. 50-454-OL
)	50-455-OL
(Byron Station, Units 1)	
and 2))	

CERTIFICATE OF SERVICE

I, Michael I. Miller, one of the attorneys for Commonwealth Edison Company, hereby certify that a copy of "Memorandum of Commonwealth Edison Company In Opposition to Intervenor's Motion to Supplement QA/QC Record Regarding Preoperational Testing" was served upon all persons shown in the attached service list by deposit in the United States mail, first class, this 13th day of July, 1983.

Michael I. Miller (BDR)
Michael I. Miller

SUBSCRIBED AND SWORN before
me this 13th day of July,
1983.

Edward S. Swanson
Notary Public
My Commission Expires January 14, 1987

SERVICE LIST

Ivan W. Smith, Chairman
Administrative Judge
Atomic Safety and Licensing Board U. S. Nuclear Regulatory Commission
U.S. Nuclear Regulatory Commission Washington, D. C. 20555
Washington, D. C. 20555

Dr. A. Dixon Callihan
Administrative Judge
Union Carbide Corporation
P. O. Box Y
Oak Ridge, Tennessee 37830

Dr. Richard F. Cole
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555

Joseph Gallo, Esq.
Isham, Lincoln & Beale
Suite 840
1120 Connecticut Avenue, NW
Washington, D. C. 20036

Region III
U.S. Nuclear Regulatory Commission
Office of Inspection & Enforcement
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Mrs. Phillip B. Johnson
1907 Stratford Lane
Rockford, Illinois 61107

Ms. Diane Chavez
326 N. Avon Street
Rockford, Illinois 61103

Dr. Bruce von Zellen
c/o DAARE
P. O. Box 261
DeKalb, Illinois 60015

Doug Cassel, Esq.
Jane Whicher, Esq.
109 N. Dearborn Street
Chicago, Illinois 60602

Ms. Pat Morrison
5568 Thunderidge Drive
Rockford, Illinois 61107

Atomic Safety and Licensing
Board Panel

U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Atomic Safety and Licensing
Appeal Board Panel

U.S. Nuclear Regulatory Commission
Washington, D. C. 20555

Docketing & Service Section
Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555

David C. Thomas, Esq.
77 S. Wacker Drive
Chicago, Illinois 60601

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

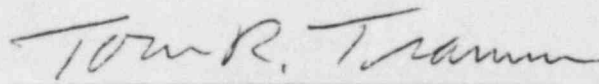
IN THE MATTER OF)
)
COMMONWEALTH EDISON COMPANY) Docket Nos. 50-454
) 50-455
(Byron Station, Units 1)
and 2))

AFFIDAVIT

Tom R. Tramm deposes and states that:

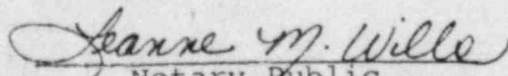
1. He is the Nuclear Licensing Administrator at Commonwealth Edison Company, and in that capacity he is responsible for the filing of Commonwealth Edison's responses to Nuclear Regulatory Commission Staff Inspection Reports.

2. The documents attached as Exhibits 1 and 2 to this Affidavit are the responses filed by Commonwealth Edison Company to N.R.C. Inspection Reports 50-454/83-17-50-455/83-15 and 50-454/83-18-455-83/15.



Tom R. Tramm

Subscribed and Sworn to
before me this 13* day
of July, 1983.



Notary Public
My Commission Expires June 9, 1984



Commonwealth Edison
One First National Plaza, Chicago, Illinois
Address Reply to: Post Office Box 767
Chicago, Illinois 60690

June 21, 1983

Mr. James G. Keppler, Regional Administrator
- Region III
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

Subject: Byron Station Units 1 and 2
Response to IE Inspection Report
Nos. 50-454/83-17 and 50-455/83-14
NRC Docket Nos. 50-454 and 50-455

Reference (a): J. F. Streeter letter to Cordell
Reed dated May 24, 1983.

Dear Mr. Keppler:

Reference (a) provided the results of an inspection conducted by Mr. M. A. Ring of your office during the periods of March 30, 31, April 1, 5-8, 18-22, 26-29, and May 4, 1983, of activities at our Byron Station. During that inspection, certain activities appeared to be in noncompliance with NRC requirements. The Attachment to this letter provides the Commonwealth Edison Company response to the Notice of Violation as appended to Reference (a), and reflects our consideration of the specific examples documented in paragraphs 2 and 3 of the inspection report as requested.

Additionally, Reference (a) indicated Region III's concerns regarding the numerous examples of our failure to follow our administrative procedures during the development of the hot functional test procedure, and the apparent inadequacies of our administrative procedures which allowed the hot functional test procedure to be approved with numerous examples of the test procedure not adequately addressing FSAR testing commitments. These matters were considered in the development of our response as requested, and we believe that the corrective actions stated should prevent such recurrence.

To the best of my knowledge and belief, the statements contained in the Attachment are true and correct. In some respects these statements are not based on my personal knowledge but upon information furnished by other Commonwealth Edison employees. Such information has been reviewed in accordance with Company practice and I believe it to be reliable.

EXHIBIT 1

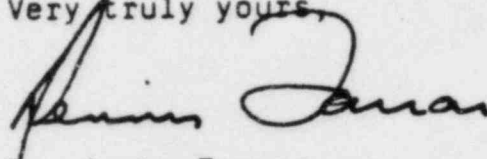
J. G. Keppler

- 2 -

June 21, 1983

Please address any questions that you or your staff may have concerning this matter to this office.

Very truly yours,

A handwritten signature in dark ink, appearing to read "Dennis L. Farrar", written over the typed name.

Dennis L. Farrar
Director of Nuclear Licensing

EDS/lm

Attachment

cc: Region III Inspector - Byron

6797N

ATTACHMENT

Response to Notice of Violation

VIOLATION 1

10 CFR 50, Appendix B, Criterion V states, "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings. Instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

Criterion XI, states, in part, "A test program shall be established to assure that all testing required to demonstrate that structures, systems and components will perform satisfactorily in service is identified and performed in accordance with written test procedures which incorporate the requirements and acceptance limits contained in applicable design documents..."

Section 2.4.3 of the Byron Startup Manual assigns Project Engineering the responsibility to review and approve all pre-operational and startup tests, provide test acceptance criteria, and ensure test objectives are properly stated and met by acceptance criteria.

Contrary to the above, the applicant approved and issued for performance Test Procedure 2.63.10, "Integrated Hot Functional," without performing an adequate review of the procedure as evidenced by incomplete or missing acceptance criteria, data not designated as acceptance criteria, misleading typographical errors, incomplete testing provisions, and incomplete objectives.

RESPONSE TO ITEM 1

CORRECTIVE ACTION TAKEN AND RESULTS ACHIEVED:

An extensive review was conducted of Revision 2 to the Integrated Hot Functional (IHF) Test procedure and the applicable FSAR commitments. As a result, the IHF Test procedure was revised and Revision 3 was issued. Corrective actions taken to address and resolve each specific example identified in Reference (a) are as follows:

- 3a. A Test Change Request (TCR) was written to Revision 2 of the IHF Test and this change was subsequently incorporated into Revision 3 to include the Component Cooling data taken as acceptance criteria. See Step 4.12 of Revision 3.

- 3b. A TCR was written to Revision 2 of the IHF Test and subsequently incorporated into Revision 3. Included as acceptance criteria (Step 4.10 & 4.11) was the capability of the Steam Dumps and Residual Heat Removal System to cool down the plant in accordance with Section 5.4.7.1 of the FSAR. Procedural steps have been reviewed and approved by the Project Engineering Department.
- 3c. A TCR was written to Revision 2 of the IHF Test and subsequently incorporated into Revision 3 to correct typographical errors. In addition, Revision 3 was reviewed to eliminate typographical errors.
- 3d. A TCR was written to Revision 2 of the IHF Test and subsequently incorporated into Revision 3 to include Essential Service Water data taken as acceptance criteria. See Revision 3 of the IHF Test, Step 4.13. Additional components serviced by Essential Service Water were added to Revision 3 of the IHF Test.
- 3e. A TCR was written to Revision 2 of the IHF Test and subsequently included into Revision 3 of the IHF Test to include the Auxiliary Feedwater Pumps and regulating valves as part of the Remote Shutdown Panel test section and acceptance criteria, thus meeting the test objective as stated.
- 3f. A TCR was written to Revision 2 of the IHF Test and subsequently included into Revision 3 of the IHF Test, to include acceptance criteria for the Chemical and Volume Control Purification System (Step 4.14.)
- 3g. A TCR was written to Revision 2 of the IHF Test and subsequently incorporated into Revision 3 to include acceptance criteria (Steps 4.16 and 4.17) for the Steam Generator Safety Valves and the Steam Generator Pressure Operated Relief Valves lift setpoints. The pressure gauges used to take data are listed in Section 7 of the IHF Test, Revision 3 special equipment. Other equipment used will be listed in the sequence of events, if necessary.
- 3h. Table 14.2-24 of the Byron FSAR was amended (Amendment No. 42, May 1983) to verify the degassing capability of the radioactive waste gas system during startup testing.
- 3i. A TCR was written to Revision 2 of the IHF test and subsequently incorporated into Revision 3, Steps 4.7 and 4.18 to add Steam Generator B, C and D level, Pressurizer level, Pressurizer pressure high deviation and centrifugal pump driven seal injection flow as acceptance criteria.

CORRECTIVE ACTION TAKEN TO PREVENT RECURRENCE:

- a. A matrix will be developed tracking particular preoperational and startup test program requirements against specific test program commitments. The matrix will be compiled through a re-review of the Byron FSAR, SER, Regulatory Guides, NRC Technical Bulletins and Notices and Industry Standards. The commitments will be referenced to the appropriate systems and preoperational test number. This matrix will be used by the Test Review Board (TRB) during initial and pre-test reviews to ensure that all requirements are established, and during post test review to verify that all acceptance criteria were met.
- b. In addition to the procedure review and approval by the Test Review Board members, an individual other than the cognizant System Test Engineer will check for and correct misleading typographical errors after the tests are typed.
- c. Test deficiencies will be written as necessary to document 1) testing commitments identified in the FSAR which are not included in a specific preoperational or startup test and 2) changes necessary to a reference document such as the FSAR to accurately reflect the test program.
- d. A test checklist will be prepared to provide a detailed listing of areas to be covered during review of initial, pre and post preoperational test reviews.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

August 15, 1983

VIOLATION 2

10 CFR 50, Appendix B, Criterion XIII states, in part, that "Measures shall be established to control the handling, storage, shipping, cleaning and preservation of material and equipment...to prevent damage or deterioration."

The Commonwealth Edison Company Quality Assurance Program contains in Quality Requirement QR 2.0 a commitment to the regulatory position of Regulatory Guide 1.39, Revision 2 which endorses the requirements of ANSI N45.2.3-1973. Section 3.2.1 of ANSI N45.2.3 states, "The work areas shall be kept sufficiently clean and orderly that construction activity can proceed in an efficient manner that will produce and maintain quality in conformance with specified requirements. Where large accumulations of materials occur on a nonroutine basis, such as the stripping of concrete forms, the material shall be promptly removed or stored neatly. Garbage, trash, scrap, litter, and other excess materials shall be collected, removed from the job site, or disposed of in accordance with specified requirements or planned practices. Such excess material shall not be allowed to accumulate and create conditions that will adversely affect quality."

Contrary to the above, the applicant's program for maintaining cleanliness and housekeeping was not being adequately implemented as evidenced by the following examples:

- a. On April 6 and 7, 1983, the inspector noted many loose pieces of lagging and considerable garbage and trash strewn about the MSIV rooms, and a coating of lagging dust covered almost everything in the B and C MSIV rooms. The A and D MSIV rooms had staging built such that instrument valves could not be operated and loose boards were leaning against valve handwheels and generally strewn about.
- b. On April 20 and 28, 1983, the inspector noted considerable food stuffs (soda cans, banana peels, orange peels, candy bar wrappers and small food tins), loose boards, and cigarette packs in the area of the Unit 2 Diesel and Motor Driven Auxiliary Feed Pumps.
- c. On April 28, 1983, the inspector noted that the SG "C" cubicle walkway had numerous pieces of rags, pop cans, cigarette butts, flexitallic gasket and general construction material.

RESPONSE TO ITEM 2

CORRECTIVE ACTION TAKEN AND RESULTS ACHIEVED

Byron Site Instruction #23, Rev. 3 dated June 3, 1982 details the Housekeeping Plan to be implemented by the Project Construction Department. This instruction identifies specific areas of the building, their appropriate cleanliness zone as defined in ANSI N45.2.3-1973, and acceptance criteria for surveillances of the Housekeeping Plan. Form SQP 18-2.27 is used to document a monthly surveillance of housekeeping activities performed per Byron Site Instruction #23.

The following details the action taken with respect to the specific examples identified in Reference (a):

Example 2A: MAIN STEAM ISOLATION VALVE ROOMS

The attached form SQP 18.2-27 (Attachment 1) documents that a surveillance of the MSIV Rooms was performed on April 4, 1983 identifying that the area needed cleaning. The same form indicates that the area was cleaned to appropriate acceptance criteria on April 8, 1983.

The operability of valves is part of the Pre-Preop Test walkdown performed by the System Test Engineer. Items identified on this walkdown are resolved on a case by case basis.

Example 2B: UNIT 2 DIESEL AND MOTOR DRIVEN AUXILIARY FEED PUMPS

Attachment 2 contains the April and May Form SQP 18-2.27 surveillances. The April surveillances indicate that the Auxiliary Building, Elevation 383' and the Auxiliary Feed Pump Diesel Day Tank Room were clean.

Example 2C: STEAM GENERATOR "C" CUBICLE

Steam Generator "C" Cubicle is part of the normal Reactor Building housekeeping surveillance. The April and May surveillances indicate that the Reactor Building housekeeping was acceptable. A special cleanup was made of Steam Generator "C" Cubicle on May 10, 1983 as part of the preparations for Hot Functional Testing.

CORRECTIVE ACTION TAKEN TO PREVENT RECURRENCE:

As stated in our response to the above specific examples, the established Housekeeping Plan defined in the Byron Site Instruction #23 has identified areas deficient in housekeeping and documented the correction of these deficiencies. In our judgment, the implementation of this Housekeeping Plan is adequate to keep site work areas sufficiently clean and orderly as required by ANSI N45.2.3-1973.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

Complete

Work of
SPT Completed on
Date needed 4-12-83.

Appendix "A"

4/4/83

Form SGP 10-2.21
Byron Site Instruction #23
Rev. 1 7/17/81
Rev. 2 4/23/82
Rev. 3 6/3/82

Reactor Building U/1 and U/2

Sheet 5 of 10

Floor Elevation	Zone	Date Insp.	Insp. By	Comments
0'-6"		4-4-83	172	U/1 New Working in P.T. - but looks Good
		4-4-83	172	1. Instrumentation Pst U/2 Still Planned over (NO ACCESS)
0'-3"		4-8-83	172	U/1 VERY DIRTY - HAS MUCH EXCESS LUMBER - INVAL AROUND LINER DR
		4-8-83	172	U/2 Needs A Good Sweeping
0'-0"		4-8-83	172	U/1 NEEDS A Good Sweep down on BEAMS - VALVES - PROX + SUFFOLD
		4-8-83	172	U/2 (OK)
0'-3"		4-8-83	172	U/1 Needs to be picked up + Remove Misc. Lumber + Scrap Steel
		4-8-83	172	U/2 Needs A Minor pickup + Some plywood WASTE Swept
0'-0"		4-8-83	172	U/1 Has Much Lumber + Misc. Steel + Gen. Debris -
		4-8-83	172	U/2 Needs Swept + Remove Small Amount of Settled Lumber
0'-0"		4-5-83	172	Sweep + Remove Misc. Lumber
		4-4-83	172	1. U/1 Fuel Poo. and Immediate Area (OK) AT THIS TIME - but New Material
		4-4-83	172	2. Tendon Tunnel 3'3"-9" (OK)
		4-8-83	172	3. Steam Tunnel 3'7"-6" U/1 Filthy - Insulation - Local Debris - Lumber - Etc - U/2 (OK)
		4-8-83	172	4. Steam Tunnel 6'-10" EAST + WEST Ends U/1 need Sweep - U/2 (OK)
		4-8-83	172	5. Safety Valve Room All Good, Head Swept + Seals/Side Swept
		4-4-83	172	6. Inside 1x vessels U/1 U/2 OK

ATTACHMENT #1

Appendix "A"

Auxiliary Building U/1 and U/2

Sheet 3 of 10

Comments

Insp.
By

Date
Insp.

Zone

Floor Elevation

5 4-4-83 1. very clean (OK)

5 4-4-83 1. very clean (OK)

5 4-4-83 1. very clean (OK)

5 4-4-83 1. very clean (OK)

5 4-4-83 1. only Area 47 NEEDS cleaning - Rest of floor is very clean
47-8-83 1. Dump Oil Storage Tank 3m. 47-8-83 Needs Sweeping

5 4-4-83 1. looks good (OK)
47-8-83 1. Norfolk Diesel oil Day Tank 2m. 355 m47

Form 54-10-2-1
Byron Site Instruction #23
Rev. 1 7/17/81
Rev. 2 4/23/82
Rev. 3 6/3/82

Appendix "A"

Auxiliary Building U/1 and U/2

Sheet 3 of 10

Comments

Insp.
By

Date
Insp.

Zone

Long Elevation

143'-0"	5-4-83	178	330 North - Meed Area - Chipped Gns + Nix. Debris on Floor
143'-0"	5-4-83	178	330 South - Meed Area - Chipped Gns + Nix. Debris on Floor
143'-0"	5-4-83	178	178 Sweep + Remove Excess Lumber + Staff
143'-0"	5-4-83	178	178 Meed Area New Block - Lumber - paper - paper + Gns, Debris Edition
143'-0"	5-4-83	178	178 Sweep out
143'-0"	5-6-83	178	178 Entire Floor Needs A Complete Cleaning
143'-0"	5-6-83	178	178 Bath Room - Sweep Floor
143'-0"	5-13-83	178	178 Diesel oil Storage Tank Area U/2 Sweep out
143'-0"	5-3-83	178	178 Very Dirty All Areas - (Belong Sweep now)
143'-0"	4-5-83	178	178 Aux Fuel Diesel oil Day Tank Area, 300, 400, 500



Commonwealth Edison
One First National Plaza, Chicago, Illinois
Address Reply to: Post Office Box 767
Chicago, Illinois 60690

June 24, 1983

Mr. James G. Keppler, Regional Administrator
- Region III
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

Subject: Byron Station Units 1 and 2
Response to IE Inspection Report
Nos. 50-454/83-18 and 50-455/83-15
NRC Docket Nos. 50-454 and 50-455

Reference (a): C. E. Norellus letter to Cordell
Reed dated May 26, 1983.

Dear Mr. Keppler:

Reference (a) provided the results of an inspection conducted by Messrs. W. Forney and K. Connaughton of your office during the period of March 1 through April 30, 1983, of activities at our Byron Station. During that inspection, certain activities appeared to be in noncompliance with NRC requirements. The Attachment to this letter provides the Commonwealth Edison Company response to the Notice of Violation as appended to Reference (a).

Reference (a) indicated Region III's particular concern regarding the repetitive nature of the examples of noncompliance identified during this inspection, and requested that Commonwealth Edison specify what measures will be established beyond previous commitments to provide the necessary additional assurances that preoperational tests will be conducted in accordance with test procedures and applicable test program requirements. These matters were considered in the development of our response to the Notice of Violation, and we believe that our corrective actions as outlined herein should prevent such recurrence.

Additionally, Reference (a) indicated Region III's concern that identified nonconformances with FSAR commitments which are dispositioned "use as is" may not be identified in the FSAR as exceptions to those commitments, and requested that we provide a description of actions taken, or planned to be taken, to assure that nonconformances so dispositioned are identified in the FSAR as exceptions to applicable commitments.

In response to this area of concern, our basic approach for establishing the need for FSAR amendments resulting from nonconformance disposition revolves around the process of achieving the disposition. As

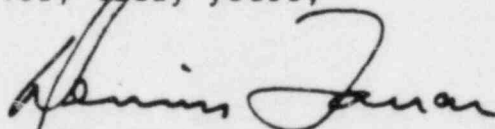
June 24, 1983

the nonconformance and proposed resolution(s) are evaluated, the cognizant Project Engineer Department (PED) engineer evaluates the status of the nonconformance and proposed resolution(s), if any, relative to FSAR commitments. If the resolution constitutes an exception to existing FSAR commitments, the PED engineer initiates, or causes the initiation of, an FSAR amendment. In our judgment, this process which is required by existing design control procedures is adequate to insure that the requisite changes to the FSAR are made.

To the best of my knowledge and belief, the statements contained herein and in the Attachment are true and correct. In some respects these statements are not based on my personal knowledge but upon information furnished by other Commonwealth Edison employees. Such information has been reviewed in accordance with Company practice and I believe it to be reliable.

Please address any questions that you or your staff may have concerning this matter to this office.

Very truly yours,



Dennis L. Farrar
Director of Nuclear Licensing

EDS/lm

Attachment

cc: Region III Inspector - Byron

6800N

ATTACHMENT

Response to Notice of Violation

VIOLATION

10 CFR 50, Appendix B, Criterion XI, "Test Control" states, in part, "A test program shall be established to assure that all testing required to demonstrate that structures, systems, and components will perform satisfactorily in service is identified and performed in accordance with written test procedures which incorporate the requirements and acceptance limits contained in applicable design documents."

The Byron FSAR, Chapter 17.0, Quality Assurance, states in part: "Therefore the CE Topical Report CE-1-A, Revision 7 and all subsequent revisions unless otherwise noted in this chapter, is the basis for the QA Program at Byron/Braidwood Station."

Commonwealth Edison Company Topical Report CE-1-A, Quality Assurance Program for Nuclear Generating Stations, Revision 20 dated February 17, 1982, Section 11, states in part: Preoperational tests which are performed on critical safety Category 1 equipment are controlled by approved written procedures....."

The Byron Startup Manual, Revision 13, dated February 3, 1983, Section 4.7.2, "Pre-Test Briefing" states in part: "Prior to starting the test the System Test Engineer will brief participants to:

- 2.1.3 Review the pertinent special precautions.
- 2.1.4 Inform each person what he will be expected to do during the test."

Contrary to the above,

- (a) Initial Condition 7.22.2, "Vibration Equipment for Sections 9.4, 9.5, 9.6, 9.7, 9.17, 9.22, 9.25, 9.26 and 9.27" had not been satisfied prior to performance of Sections 9.4, 9.5 and 9.6.
- (b) During the performance of Sections 9.4 and 9.5 of Preoperational Test 2.63.10 "Integrated Hot Functional Test", precaution 8.19 which required that the test be exited upon any indication of a loose part on the loose parts monitoring system was not observed in that all channels of the loose parts monitoring system were in a high alarm state.
- (c) Reactor Coolant System pressure and temperature were not maintained within their expected ranges and testing continued after the out-of-tolerance values were read from the prescribed instrumentation and recorded.

- (d) Pre-test briefing of operators prior to performance of Section 9.5 and 9.6 did not include a review of precaution 8.19 or the Reactor Coolant System temperature and pressure control bands as evidenced by interviews with test support personnel and examples (b) and (c) above.

ITEM (a) RESPONSE

CORRECTIVE ACTION TAKEN AND RESULTS ACHIEVED:

The Identification number and calibration date for the vibration equipment used for Sections 9.4, 9.5 and 9.6 was entered in step 7.22.2 of the Integrated Hot Functionals (IHF) procedure and signed off on April 28, 1983.

CORRECTIVE ACTION TAKEN TO PREVENT FURTHER NON-COMPLIANCE:

The Integrated Hot Functionals (IHF) System Test Engineers have been designated the responsible individuals for verifying and signing all prerequisites, initial conditions and procedure steps.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

Full compliance was achieved on June 20, 1983.

ITEM (b) RESPONSE

CORRECTIVE ACTION TAKEN AND RESULTS ACHIEVED:

Fuels Group members were called to the U1 Auxiliary Electric Room by Operating on April 27, 1983 to evaluate the Loose Parts Monitoring System (LPMS) status. All the Loose Parts Detectors (LPDs) were found in the "LOW ALARM" state which indicates a lack of background noise. At least some of the LPDs were in the "HIGH ALARM" state. The audio alarm switch was in the "off" position to silence an otherwise continuous alarm due to the LPD "LOW ALARM" states in the Auxiliary Electric Room. The LPMS System Test Engineer (STE), was able to clear all the HIGH ALARM lights by using the reset switch for each LPD. This indicated that the HIGH ALARM lights were due to Reactor Coolant Pump (RCP) cycling required by the IHF procedure. Because the RCPs were no longer running, the HIGH ALARMS could reset and the LOW ALARMS would stay on. This agreed with plant conditions and no further action was necessary relative to Precaution 8.19.

CORRECTIVE ACTION TAKEN TO PREVENT FURTHER NON-COMPLIANCE:

- Several actions were taken to prevent recurrence: -

1. Byron Annunciator Response (BAR) 1-13-E9 has been written to assist the operators in determining what actions to take in response to a LPMS alarm.
2. The LPMS alarm modules now initiate an alarm in the Main Control Room when an alarm condition is reached.
3. The Integrated Hot Functionals Coordinators and selected personnel in Operating including some Shift Engineers have been instructed on how to perform an initial diagnosis of LPMS problems. They have also been instructed in the basic understanding of the LPMS.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

Full compliance was achieved on June 20, 1983.

ITEMS (c) and (d) RESPONSE

CORRECTIVE ACTION TAKEN AND RESULTS ACHIEVED:

Test Deficiency AG for the Integrated Hot Functionals (IHF) preoperational test was written to document that recorded values for temperature and pressure were outside the bands specified in the test procedure. The Test Deficiency will be reviewed by the Post Test Review Board and is the record of improper actions taken by the STE. Test Change Request #56 changed the allowable temperature range from the span of 140°F to 160°F, to greater than 10°F which is still consistent with NSSS vendor recommendations. The STE and the Unit One operator both began using the 403 Pressure Loop for maintenance of Reactor Coolant System Pressure within the specified limits. The STE then reperformed the steps of sections 9.5 & 11.5 in which pressure and temperature were initially outside the specified bands.

CORRECTIVE ACTION TAKEN TO PREVENT FURTHER NON-COMPLIANCE:

Several actions were taken to prevent recurrence of test briefing problems as identified in Reference (a) and in previous Inspection Reports as follows:

1. A letter from the Assistant Superintendent of Operating to the Nuclear Station Operators (NSOs) was issued on May 19, 1983. The purpose of the letter was to delineate the responsibilities of the NSOs with regards to shift turnovers and test briefings received from STEs. Some of the minimum requirements the NSOs are to expect and demand of test briefings include reviewing all pertinent precautions and operational bands specified by the IHF test procedure.
2. Per a letter from the Assistant Superintendent of Operating, approved by the Station Superintendent, to the Department Heads and Shift Engineers dated April 27, 1983, the Assistant Superintendent has delegated his normal daily activities to the Operating Engineer. The Assistant Superintendent of Operating has devoted himself to full time coordination of the Integrated Hot Functional activities to provide the highest level of responsibility and authority as well as Technical and Management expertise. Three experienced individuals have been designated as IHF Coordinators and report directly to the Assistant Superintendent of Operations. Their main responsibility is to coordinate interdepartmental actions relating to Hot Functionals.
3. An Onsite Review was held to review recent problems encountered in the test program. The three main topics discussed were system control, test conduct, and design changes to the plant.

Some of the conclusions of this review were to:

- a. Re-emphasize that the STE should be aware of all changes or maintenance to his system for proper system control. An example of the increased attention paid to system control is the fact that the Tech Staff Representative at the Plan of the Day Meeting reviews all Nuclear Work Requests and notes on the Work Request any special conditions or precautions to be observed.
- b. Reduce the number of non-IHF activities during the Hot Functionals test which might detract from its performance.
- c. Re-emphasize that the NSOs are responsible for conservative operation of the plant.
- d. Improve the quality of shift turnovers. For example, Shift Supervisors coming off shift now periodically observe shift turnovers by Operating personnel. They provide verbal feedback to the operators on their turnover and record the results on Station observer forms for review by station management.

- e. Use Status boards in the Main Control Room to enhance awareness of plant status by all station departments.
- 4. The Station Superintendent has met with various work groups in the station to discuss the test program and each group's responsibilities relating to a high quality program.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

Full compliance was achieved on June 20, 1983.

6800N