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EF2-64314

Mr. R.L. Spessard, Director
Division of Engineering
U.S. Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Subject: Noncompliance at Enrico Fermi Unit 2 - IE Report 50-341/83-07

Dear Mr. Spessard:

This letter responds to the items of noncompliance described in your IE Report No. 50-341/83-07. This inspection of Enrico Fermi Unit 2 construction site activities was performed by Messrs. P.A. Barrett, K.R. Naidu, R. Mendez, I. Ahmed and B.H. Little on March 15-17, 24, April 11-14, 18, 19 and May 3, 1983.

The items of noncompliance are discussed in this reply as required by Section 2.201 of the NRC's "Rules of Practice", Part 2, Title 10, Code of Federal Regulations.

The enclosed response is arranged to correspond to the sequence of items cited in the body of your report. The number for the item of noncompliance and the applicable criterion is referenced.

We trust this letter satisfactorily answers the concern raised in your report. If you have questions, please contact Mr. G.M. Trahey, Assistant Director - Project Quality Assurance.

Very truly yours,

DAWells

DAW/WEM/pn

cc: Mr. Richard DeYoung, Director
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
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Mr. Paul Byron, Senior Resident Inspector
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AUG 31 1983

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THE DETROIT EDISON COMPANY

PROJECT QUALITY ASSURANCE

ENRICO FERMI 2 PROJECT

Response to NRC Report No. 50-341/83-07

Docket No. 50-341 License No. CPPR-87

Inspection at: Fermi 2 Site, Newport, Michigan

Inspection Conducted: March 15-17, 24, April 11-14, 18, 19 and May 3, 1983

APPROVED T. A. Alessi DATE 8/26/83

Director - Project Quality Assurance

Response to NRC Inspection Report No. 50-341/83-07 (83-07-01)

Statement of Noncompliance, 83-07-01

10CFR50, Appendix B, Criterion XVIII states, in part, "A comprehensive system of planned and periodic audits shall be carried out...to determine the effectiveness of the QA program. Followup action, including re-audit of deficient areas, shall be taken where indicated".

The Enrico Fermi Power Plant Unit 2 Quality Assurance Manual, Procedures Nos. 19.3.8 and 19.3.9, Revision 6 state, in part, "Audit results shall include, where appropriate, analysis of quality data to measure QA program effectiveness and indicate quality trends... Compliance with corrective action requirements should be verified by re-audit if necessary".

Contrary to the above, as of January, 1983, Detroit Edison failed to take adequate followup action, including re-audit and/or significant surveillance of deficient areas within the design change distribution program to determine the effectiveness of that program. Specifically, a June 1981, Detroit Edison audit identified that several contractors were not adequately distributing design changes, and significant followup action was not taken to determine if the program was effectively corrected.

Corrective Action Taken and Results Achieved

Detroit Edison's Information Systems Organization has formed a group titled "Internal Quality Control Group of Information Systems". This group has instituted a program whereby each recipient of controlled design documents is audited on a periodic basis to verify the recipient has the latest design document, as well as, design change documents.

Project Quality Assurance's Construction Quality Assurance organization has undergone reorganization whereby an actual Corrective Action group has been formed. This group has primary responsibility for assuring that adequate followup actions are instituted to adverse audit findings.

Corrective Action Taken to Avoid Further Noncompliance

The Corrective Action group will initiate programs to assure that significant audit findings are closed satisfactorily. These significant audit findings will stay open until programs are in place, and it has been verified that corrective action is complete.

The Date When Full Compliance will be Achieved

The Corrective Action program will be in place by August 31, 1983.

Statement of Noncompliance, 83-07-03

10CFR50, Appendix B, Criterion V states, in part, "Activities affecting quality shall be prescribed by documented instructions, procedures or drawings...and shall be accomplished in accordance with these instructions, procedures, or drawings".

Enrico Fermi, Unit 2, Project Procedures Manual, Part II, Procedures 3.20, Revision 4, Paragraph 5.6 and 3.21, Revision 4, Paragraph 5.7 require that the number of outstanding change papers (DCR, DCN, FMR, etc.) against any document do not exceed five.

Contrary to the above, as of February 5, 1983, the number of unincorporated design changes were as follows:

- Specification 3071-31 had 60
- Specification 3071-33 had 23
- Specification 3071-128 had 18
- Drawing 5E721N-0061A had 30
- Drawing 5E721N-0061C had 28

Corrective Action Taken and Results Achieved

The corrective action taken on those five (5) documents was to incorporate the outstanding (open) change documents identified in the NRC Report. However, issuing and incorporating change documents is a dynamic activity and the number of change documents open against design documents fluctuates. Below is the status (as of August 4, 1983) of each design document identified in the NRC Inspection Report and the number of open change documents against them.

Document	Revision	Open Change Documents
3071-031	G	2
3071-033	O	Ø
*3071-128-EA	AE	Ø
3071-128-EB	AE	2
3071-128-ED	AE	2
3071-128-EQ	AE	1
3071-128-ET	AE	Ø
5E721N-0061A	J	Ø
5E721N-0061C	J	3

As of August 4, 1983, the number of QA Level 1 design documents with five (5) or more open change documents has been reduced to forty-two (42).

*Note: Refer to Corrective Action Taken to Avoid Further Noncompliance regarding specification 3071-128.

Corrective Action Taken to Avoid Further Noncompliance

Project Engineering has made the following commitment to control the number of unincorporated change documents against design documents:

> The number of QA Level 1 design documents with five (5) or more change documents open against them shall be one hundred fifty (150) or less. The objective is that no design document shall have more than a total of five (5) change documents open against it.

To meet the stated commitment, the following actions have been taken:

- Change document incorporation into design documents will be initiated when any drawing or specification accumulates three (3) change papers against it.

- Should any QA Level 1 design document attain eight (8) or more outstanding (open) change documents against it, the design document shall be identified and the incorporation of all change documents shall be expedited. The director of project design will take appropriate action concerning design documents, including such action as issuing "Stop Work" directives, until the change documents have been incorporated into the affected design document.

To implement these actions, two organizations have been formed to control and monitor the issuance and incorporation of change documents into design documents. These organizations are the Change Control Board and the Change Control Group.

The Change Control Board (CCB) is charged with the responsibility to assure that all necessary measures are taken to control changes on the Fermi 2 Project. The CCB functions in the review and approval stage of the change document process prior to issuance of the change document. Change documents are screened and released for engineering and construction by the CCB. The Assistant Project Manager - Engineering, is designated as chairman of the CCB, with members from the various organizations assigned to the CCB. Project Procedure 3.26 delineates the responsibilities and duties of the CCB.

The Change Control Group (CCG) is responsible for control of all changes starting with the issuance of the change document through the incorporation of the change document into design documents. The CCG is responsible for identifying and monitoring all design documents having outstanding (open) change documents. Further, the CCG provides scheduling, expediting and documentation of status at all stages of the change process.

Corrective Action Taken to Avoid Further Noncompliance (cont'd)

In addition to the newly-formed organizations, project specification 3071-128 has been divided into fifteen (15) major sections for ease of identifying and incorporating change documents. Change documents, when issued against this specification, must now identify the particular section of the specification it was issued against. Further, the specification is now revised according to each section. This process allows construction and engineering to readily identify the change documents of concern when utilizing the specification, allows more frequent revisions, and reduced the cost of revising the specification.

The Date When Full Compliance will be Achieved

Full compliance has been achieved.

Statement of Noncompliance, 83-07-05a

10CFR50, Appendix B, Criterion VI states, in part, "Measures shall be established to control the issuance of documents, such as...drawings, including changes thereto, which prescribe all activities affecting quality. These measures shall assure that documents, including changes...are distributed to and used at the location where the prescribed activity is performed".

The Enrico Fermi Power Plant, Unit 2, Quality Assurance Manual, Procedure No. 5, Revision 4 states, in part, "Written procedures shall be implemented for receiving, identifying, filing...and reporting the status of project documents to assure such documents are adequately controlled and to assure documents, including changes, thereto, prescribing activities affecting quality have been...distributed and used at the work place where these activities are performed".

Contrary to the above:

a. As of April 13, 1983, appropriate instructions or procedures had not been developed to assure that design changes would be controlled and that such control would result in proper and timely updating of drawing copies at the location where the prescribed activity is performed. Consequently, at Detroit Edison Start-Up and L.K. Comstock distribution points, lack of instructions resulted in twenty-four (24) and eighteen (18) design changes, respectively, which had not been marked (posted) on Drawing 6E721N-0010. Additionally, Field Modification Requests (FMRs) S5552 and S5554 issued on March 4, 1983, Design Change Notice (DCN) 8819 and Design Change Request (DCR) P12404 both issued on March 7, 1983, had not been posted on their respective drawings. Further, numerous errors, discrepancies, and inconsistencies between the ARMS-PMO4 listing, the master drawing copy in Document Control, and with drawings issued for construction in the field were noted (see Paragraph 4, of Inspection Report 50-341/83-07).

Corrective Action Taken and Results Achieved

Each of the specific errors identified by the inspectors has been investigated and appropriately resolved.

Corrective Action Taken to Avoid Further Noncompliance

1. Functional Modifications

An internal quality control function was implemented in early 1983. This group reviews the currency of design documents affected by change since the previous review, in each of the several document control satellites on a monthly basis, and the

Statement of Noncompliance, 83-07-05b

10CFR50, Appendix B, Criterion VI states, in part, "Measures shall be established to control the issuance of documents, such as...drawings, including changes thereto, which prescribe all activities affecting quality. These measures shall assure that documents, including changes...are distributed to and used at the location where the prescribed activity is performed".

The Enrico Fermi Power Plant, Unit 2, Quality Assurance Manual, Procedure No. 5, Revision 4 states, in part, "Written procedures shall be implemented for receiving, identifying, filing...and reporting the status of project documents to assure such documents are adequately controlled and to assure documents, including changes thereto, prescribing activities affecting quality have been...distributed and used at the work place where these activities are performed".

Contrary to the above:

b. As of April 14, 1983, the licensee's document control measures failed to provide for incorporating design changes into control documents used in the performance of preoperational testing. The control documents did not reflect the changes made, and the responsibility for incorporating changes was not defined for systems undergoing preoperational testing.

Corrective Action Taken and Results Achieved

Paragraph 5a of the subject Inspection Report states that a hardware change, Design Change Request (DCR) No. SB2336 Revision A, was implemented during preoperational testing of the Standby Liquid Control System (SLCS), but that the change was not reflected in the Preoperational Test Procedure (C4100.001) or the Preoperational Reference Documents. The PRET.C4100.01 was not revised since the DCR No. SB2336 Revision A is for a test connection to support LLRT which is not a part of this PRET. The Startup Test Engineer requested that SOP 23.139 be revised to include the hardware changes implemented by Design Change Request (DCR) No. SB2336, Revision A.

As of April 14, 1983, all of the applicable design changes noted in deficiency finding 5a above have been incorporated into the System Operating Procedure (SOP) 23.139, "Standby Liquid Control System" with Temporary Change Request No. T0149.

The nonconformance cited in 5b states, "No deficiencies were identified with Reactor Recirculation System. Design Change Notice (DCN) No. 8200, issued November 23, 1982, added 1¼ inch "keep full" piping, valves, and spool pieces to the Reactor Water Cleanup System (RWCS). The hardware change was completed in March 1983, during preoperational testing of the RWCS. This DCN was noted on PRET

Corrective Action Taken to Avoid Further Noncompliance (cont'd)

currency of "For Construction" design documents of all recipients on a bi-monthly basis. As a result of this NRC inspection, this function has been modified to include a 100% review of all design documents in the satellites on a rotating (one per month) basis. Errors detected in any case are corrected as found.

2. Procedural and Training Modifications

Plant Operations Manual 12.000.09, Revision 1, "Management of Records", was issued April 5, 1983. The procedure defines the functions and responsibilities for the management of Fermi 2 records by the Records Center, Plant Technical Library, and Information Centers as defined in ANSI N45.2.9-1974, and ANSI N45.2.11-1974, Sections 7 and 8.

Plant Operations Manual 12.000.40 "Management of Controlled Documents", was issued April 5, 1983. The procedure defines the functions and responsibilities for the management of controlled Fermi 2 documentation as defined in ANSI N45.2.9-1974, and ANSI N45.2.11-1974, Sections 7 and 8, by Document Control.

These two procedures present a comprehensive overview of the functions and responsibilities of Nuclear Administration - Information Systems. They identify requirements, responsibilities, interfaces and guidelines for the activities described between Nuclear Administration - Information Systems, Document Control and other Nuclear Operations organizational units and Construction (when used with PPM Section 2 procedures).

Information Systems supervisors and work leaders have received classroom instruction on the procedures. The session was video taped and all personnel have viewed it. Further, all new personnel coming into the Information Systems department and applicable contractor personnel will be trained on the application of these two procedures.

Lastly, Information Systems Work Instruction ISWI 00.40.23, "Document Control Satellites", issued June 27, 1983, describes the methods used to effectively process drawings and other related documents in the Document Control Satellites. All involved personnel will have been trained on this instruction by September 1, 1983.

The Date When Full Compliance will be Achieved

Full compliance will be achieved by September 1, 1983.

Corrective Action Taken and Results Achieved (cont'd)

Reference Diagram 6M721-2046, but not in the referenced SOP 23.707 which is the document used for making system valve lineups." The valves in question are assigned to the Condensate System (P1100) and not the Reactor Water Cleanup System (G3300).

As of July 5, 1983, all of the applicable design changes and any outstanding Temporary Change Requests have been incorporated into the Major Modification of SOP 23.707, "Reactor Water Cleanup".

Corrective Action Taken to Avoid Further Noncompliance

The Startup Test Engineer is responsible for reviewing change documents to assess their impact and assure incorporation into the preoperational test, and for requesting that the change documents be incorporated in the SOP. This responsibility is documented in Startup Instruction 8.1.0.01, (Testing Progress Checklist, Revision 7), dated July 9, 1983, and Startup Letter 10,872, dated March 24, 1983.

The responsibility for revising SOPs lies with Nuclear Operations Department, however, Startup does submit information and recommendations for revision.

Upon notification from the responsible Startup Test Engineer, Nuclear Operations ensures that any recommendations for improvement and/or corrections to SOPs are given full consideration. Recommendations, if being offered on systems not yet undergoing preoperational testing, can be forwarded to the Operations Engineer for processing. Any recommendation, detailing a design change or equipment modification, directly impacting an SOP shall be incorporated in a timely manner. Procedural changes necessary to support a preoperational test in progress will be handled promptly by the on-duty Nuclear Shift Supervisor and the Startup Test Engineer per Plant Operating Manual, General Administrative Procedure 12.000.07. This procedure clearly defines Nuclear Operations responsibilities during preoperational testing prior to initial fuel loading. This procedure has been revised to comply with NP-83-1073 and has been implemented by Nuclear Production personnel.

Nuclear Production memorandum NP-83-1073 dated July 1, 1983, states in part: "During the course of the field verification, if a change is required in the Nuclear Production procedure used during preoperational test, the change can be made by pen and ink, noted and dated by the Startup Test Engineer, the Nuclear Shift Supervisor and, if safety related, by the Quality Assurance organization's representative. The test may then continue".

"Upon completion of the preoperational test...the marked up master Nuclear Production procedure shall be submitted as a Major Change

Corrective Action Taken to Avoid Further Noncompliance (cont'd)

request. The field copy used in preoperational test is maintained with the preoperational test package as a record of the testing activities."

The Date When Full Compliance will be Achieved

The procedures discussed above are approved and in place. Full comliance has been achieved.