



Commonwealth Edison
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October 14, 1982

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

Subject: Byron Station Units 1 and 2
 I&E Inspection Report No.
50-454/82-14

Reference (a): September 13, 1982, letter from
 C. E. Norelius to Cordell Reed.

Dear Mr. Keppler:

Reference (a) provided the results of an inspection conducted by Messrs. M. Ring and D. Robinson of your office during July, 1982 at Byron Station. During the inspection it was determined that certain activities were not in compliance with NRC requirements. Attachment A to this letter contains Commonwealth Edison's response to the Notice of Violation which was appended to reference (a).

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 and contractor employees and consultants. Such information has been reviewed in accordance with Company practice and I believe it to be reliable.

Please address further questions regarding this matter to this office.

Very truly yours,

L. O. DelGeorge
 Director of Nuclear Licensing

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SUBSCRIBED and SWORN to
 before me this 15th day
 of October, 1982

Rosalie A. Pinta
 Notary Public

ATTACHMENT A

Response to Notice of Violation

Violation 1

10 CFR 50, Appendix B, Criterion X states in part that, "A program for inspection of activities affecting quality shall be established and executed by or for the organization performing the activity."

The Byron Startup Manual in Section 4.1.4.1 states, "Deficiencies are documentation of incomplete or improper installation, documentation, design, or testing identified at the time of Turnover for Test, or thereafter."

In addition, under Section 4.5 System Release for Testing, the Byron Startup Manual describes the following responsibilities:

- 4.5.2 Project Construction, the Project Operational Analysis Department and Site Quality Assurance will review the test System Data Package and document the status of each item for which they have responsibility. Deficiency drafts are prepared for items not completed.
- 4.5.3 The Project Construction Department Engineer and site Quality Assurance complete the Q.A./Construction System Review form (BSM 4-4) verifying all work is complete and that deficiency drafts have been prepared.
- 4.5.9 The Project Construction Superintendent and the Site Q.A. Supervisor sign form Q.P. 11-2.2 indicating either:
 - 5.9.1 All items indicated for release are signed off or
 - 5.9.2 All items indicated for release are signed off and deficiencies have been written, or
 - 5.9.3 All items indicated for the release which are not signed off have had a deficiency written.

Contrary to the above:

- a. On July 8, 1982, three orifice plates in the component cooling system, 1FE-CC054, 1FE-CC055, 1FE-CC056 were found to be missing despite the turnover package signoff indicating installation.
- b. At the time of initial conditions verification for test Procedure 2.66.10, the Test Engineer found the reactor cavity sump weir missing despite the turnover package signoff indicating all mechanical installation complete with no deficiencies relating to the weir.

Item 1a

Corrective Action Taken and Results Achieved

During the pre-op test of the Component Cooling System, (CC) 2.10.10, it was identified that three non-safety related orifice plates, 1FE-CC054, 1FE-CC055, 1FE-CC056 were not installed but were signed off on the System Documentation Package (SDP) as installed. The SDP was signed off by the Project Construction Engineer indicating the orifice plates were installed during the initial installation of the system. The pre-turnover walkdown by the Project Construction, Startup, and Technical Staff also indicated that the orifice plates were installed. After this point the orifice plates were removed for one of the following reasons without the knowledge of the Project Construction Engineer:

- 1) They were removed to facilitate flushing of the penetration cooling lines at the direction of the Technical Staff.
- 2) They were removed by the piping contractor to revise the orifice plate hole diameter as authorized by a design revision.

Since these orifice plates are non-safety related, no installation documentation by the piping contractor is available to determine which actually occurred. When the orifice plates were identified as missing, the revised orifice plates were installed by the piping contractor.

Corrective Action Taken to Avoid Further Noncompliance

The piping contractor has initiated a revision to SIP 4.000, "Control of Construction Processes", to include a modified "Hardware Removal/Alteration Report Form". This document will track removals and temporary additions to systems starting when re-entry control is established. This form will track work authorized by Project Construction Department and the station Technical Staff. The use of deficiencies to record temporary removals and additions still in place after flush has been reviewed with the responsible Technical Staff personnel.

Date When Full Compliance Will Be Achieved

The revised procedure was approved and implemented on September 29, 1982. The implementation process will be fully completed by November 28, 1982 when personnel training is completed.

Item 1b

Corrective Action Taken and Results Achieved

The weir plate was installed and the test was performed.

Corrective Action Taken to Avoid Further Noncompliance

The System Data Package (SDP) referred to in the "Byron Startup Manual" documents the status of the system components that are identified on the mechanical or piping and instrumentation drawings by a equipment part number (EPN). The reactor cavity sump weir has no EPN and would not normally be tracked via this method. The missing weir should have been discovered during one of the following systematic reviews of the construction status of each system prior to testing:

1. Long-term walkdown at approximately 12 weeks before Turnover for Test by the System Test Engineer, Construction Engineers, Station Operating Department, and Maintenance.
2. A repeat of this walkdown at approximately six weeks prior to Turnover for Test.
3. A pre-acceptance walkdown by the System Test Engineer.
4. A listing in the System Documentation Package of the equipment required for test.
5. Contractor punch lists of work remaining.

These reviews have worked satisfactorily in the turnover of approximately 100 systems at Byron. The event cited appears to be an isolated occurrence. No action other than review of the event with the System Test Engineers is warranted.

Date When Full Compliance Will Be Achieved

We are currently in compliance.

Violation 2

10 CFR 50, Appendix B, Criterion XIV states in part that, "Measures shall also be established for indicating the operating status of structures, systems, and components of the nuclear power plant or fuel reprocessing plant, such as by tagging valves and switches, to prevent inadvertent operation."

The Byron Startup Manual in Section 4.1.2.2 states, "Under re-entry control, system cannot be taken out of service without the concurrence of the System Test Engineer or Pre-Op Coordinator as to the Out of Service Boundaries."

Contrary to the above:

- a. On July 9, 1982, after re-entry control had been established, the component cooling system lines to the waste gas compressor heat exchanger were found blanked off during post flushing flow verifications for the component cooling system. This was apparently done without the knowledge or concurrence of either the System Test Engineer or the Pre-Op Coordinator.
- b. On July 13, 1982, the System Test Engineer found relief valves OCC9425A and OCC9425 in the component cooling system had been removed without following re-entry control requirements.

Corrective Action Taken and Results Achieved

During the performance of the Component Cooling System Preoperational Test, (CC) 2.10.10, blank off plates were found in the CC lines to the waste gas compressor heat exchangers. The subsequent investigation revealed that during the performance of the waste gas system (GW) 2.38.10 flush, the technical staff engineer gave direction to the craft personnel assisting him to install blank off plates on the GW compressor heat exchanger in order to protect the equipment during the flush. The craft personnel blanked off the inlet and outlet of the compressor side of the heat exchanger and the heat exchanger water side inlet, outlet, and relief valves OCC9425 A&B. When the waste gas system flush was complete, only the blank off on the compressor side of the heat exchanger was removed. The blank offs on the water side of the heat exchange were removed after being found during the CC system post flush activities.

Corrective Action Taken to Avoid Further Noncompliance

The piping contractor has initiated a revision to SIP 4.000, "Control of Construction Processes" to include a modified Hardware Removal/Alteration Report Form. This document will track removals and temporary additions to systems starting when re-entry control is established. The form will track work authorized by Project Construction Department and the station Technical Staff. The use of deficiencies to record temporary removals and additions still in place after flush has been reviewed with the Technical Staff.

Date When Full Compliance Will Be Achieved

The revised procedure was approved and implemented on September 29, 1982. The implementation process will be fully completed by November 28, 1982 when personnel training is completed.

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