

U. S. NUCLEAR REGULATORY COMMISSION

Report No. 50-455/86036(DRS)

Docket No. 50-455

License No. NPF-60

Licensee: Commonwealth Edison Company
Post Office Box 767
Chicago, IL 60690

Facility Name: Byron Station, Unit 2

Inspection At: Byron Site, Byron, Illinois

Inspection Conducted: October 8-30, 1986

Inspectors:

F. J. Jablonski
H. A. Walker

11-26-86

Date

R. N. Sutphin
R. N. Sutphin

11/26/86

Date

Approved By: *F. J. Jablonski*
F. J. Jablonski, Chief
Quality Assurance Programs Section

11-26-86

Date

Inspection Summary

Inspection on October 8-30, 1986 (Report No. 50-455/86036(DRS))

Areas Inspected: Routine, unannounced inspection of Quality Assurance (QA) for preoperational testing (35301); QA program administration (35740); audit program (35741); document control program (35742); maintenance program (35743); design changes and modification program (35744); surveillance testing program (35745); procurement control program (35746); receipt, storage, and handling of equipment and materials (35747); records program (35748); tests and experiments program (35749); test and measuring equipment program (35750); and preoperational test program records (39301).

Results: No violations or deviations were identified.

DETAILS

1. Persons Contacted

Commonwealth Edison Company (CECo)

*W. Burkamper, QA Superintendent
S. Campbell, Office Supervisor
*P. Donavin, Field Engineering Coordinator
*F. Hornbeak, Technical Staff Supervisor
*T. Joyce, Assistant Superintendent, Technical Services
*F. Klinger, Project QC Supervisor
*L. Martin, Construction QA Superintendent
*J. Meister, Overall Field Coordination
*R. Moravel, Project Construction Assistant Superintendent
*P. O'Neill, Quality Control Supervisor
*J. Pausche, Regulatory Assurance
*W. Pirnat, Regulatory Assurance
R. Pleniewill, Production Superintendent
*R. Querio, Station Manager
*R. Rhoads, Maintenance Staff
*G. Schwartz, Assistant Superintendent Maintenance
M. Snow, Assistant Regulatory Assurance Supervisor
*J. Snyder, QA Inspector
*R. Steder, Technical Staff
*R. Ward, Services Superintendent
*J. Woldridge, QA Supervisor
*K. Yates, Onsite Nuclear Safety
*E. Zittle, Regulatory Assurance Staff

Westinghouse Electric Corporation

*M. Pitluk, Manager

*Denotes those attending the exit meeting on October 30, 1986.

2. Areas Inspected

This inspection was conducted to verify that the QA Program had been properly implemented for Byron, Unit 2 in specific programmatic areas. Byron Units 1 and 2 share a common CECo QA Program, and in most cases, the same procedures. Verification of compliance with regulatory requirements and quality assurance program commitments was performed by reviewing applicable procedures and records, conducting personnel interviews, and observing work activities. Inspection results are documented in the following sections.

a. Quality Assurance Program Implementation (35740)

The inspector reviewed implementation of the QA program in each of the areas inspected. Details are described in the following sections of this report. The program appeared to be properly implemented in all areas. Controlled procedures that described methods used for conducting the respective activities were in place. Management personnel appeared to be knowledgeable of regulatory and quality program requirements.

No violations or deviations were noted in this area.

b. Quality Assurance for the Preoperational Testing Program (35301)

The inspector completed the review of QA coverage for preoperational testing. The operations QA organization performs audits or surveillances of each safety related preoperational test. They also perform a post test review of each preoperational test package after the required testing has been completed. Results of these audits, surveillances, and reviews are provided to the construction QA organization for review and evaluation prior to turnover of the system or subsystem to operations. Construction QA performs a complete review of the turnover packages to verify the system/subsystem status with emphasis on the tracking and resolution of open items.

The NRC inspector reviewed eight turnover packages and the respective preoperational test records for which turnover to operations had been completed. Records of four audits of preoperational tests were also reviewed. Quality Assurance associated with preoperational testing activities appeared to be adequately performed.

No violations or deviations were identified.

c. Audit Program (35741)

The inspector reviewed the program used for operations and preoperational testing audits. Procedures QP 18-51, "Audits for Operations - Quality Assurance Program Audits," issued August 12, 1986, and QP 18-25, "Audit and Surveillance of Maintenance, Spare Parts and Inservice Inspection Activities," issued August 12, 1986, were reviewed to verify compliance with QA program requirements. Also reviewed was QA Manager's Instruction No. 16 issued October 30, 1985, regarding the qualification and certification of QA auditors. The procedures were acceptable.

Records of four audits were reviewed and determined acceptable.

Certification records for four auditors were reviewed. The inspector noted that one lead auditor appeared to have not been properly certified because two certification points were awarded for two years experience in QA when the individual actually worked in QA for less than six months at the time of certification on

September 13, 1985. The lead auditor served as a lead auditor for several audits beginning with Audit No. 06-85-73.61 conducted October 18 to 24, 1985. Licensee personnel took immediate action to correct the above inspector noted problem. The number of audits that the individual served as lead auditor was determined and those audit records were reviewed by properly certified lead auditors to determine if identified deficiencies were proper and if any irregularities existed. Twenty audit record packages were reviewed and no discrepancies were noted. The inspector determined that this was an isolated case with no impact on safety. Revision 5 to the audit qualification/certification procedure, QA Manager Memorandum No. 16 was issued on October 15, 1986, to provide a clarifying statement to ensure that the term "quality assurance experience" was properly defined. The inspector has no further concerns about this matter. Audit program activities were being adequately controlled.

No violations or deviations were identified.

d. Document Control Program (35742)

The inspector reviewed design control activities for control of drawings, procurement and construction specifications, and station procedures. Design drawings were maintained on microfilm. Copies were made and issued as needed. Prior to issuing a drawing, a computer printout which provided the current revision level of design drawings, was reviewed so that only current drawings would be issued. Specifications were manually controlled using the "Specification Log". Procedure "master copies" with approval sheets were maintained in Central Files. Twenty five procedures were selected and the master copy and approval sheets were reviewed for each one. All procedures were the current issue.

No violations or deviations were identified.

e. Maintenance Program (35743)

The inspector reviewed the preventative and corrective maintenance programs and their implementation.

The preventative maintenance program utilized two computerized systems to track and initiate work on routine preventative maintenance items. Periodic maintenance intervals were established using manufacturer's recommendations. Where manufacturer's recommendations were not available, engineering established the interval based on past experience or an evaluation of the item's use. Both systems utilized tracking and notification methods. One system was used for mechanical and electrical equipment; the other was used for instrumentation. Both systems were functioning and appeared to be properly implemented.

Corrective maintenance was performed as equipment troubles were noted utilizing Nuclear Work Requests (NWRs). BAP 1600-1, "Nuclear Work Requests," Revision 8, was reviewed and found to be acceptable. Maintenance program activities were being adequately controlled. The NWR form was used to document work instructions, required approvals, and completion of work. The NWR, with supporting documentation, was maintained as a record of the completed work activity. Ten NWRs were reviewed for adequate work instructions, required reviews and approvals. Maintenance activities were being adequately controlled.

No violations or deviations were identified.

f. Design Changes and Modifications (35744)

The design change and modification program was based on Q.P. 3-51, "Design Control for Operations Plant Modifications" and Q.P. 3-52, "Design Control for Operations - Plant Maintenance" of the CECO QA Manual. Attachment A to QP 3-51 defined a modification as covered by Q.P. 3-51.

The inspector reviewed procedures BAP 1650-1, "Modification Processing Procedures," Revision 7; BAP 330-2, "Temporary Alterations," Revision 51; and BAP 400-3, "Setpoint/Scaling Changes," Revision 7. The design change and modification program was adequately defined. No completed design change packages for Unit 2 were available for review.

No violations or deviations were identified.

g. Surveillance Testing Program (35745)

The inspector reviewed BAP 1400-1, "Byron Station Surveillance Program," Revision 4. This procedure describes the program used for surveillance testing at Byron.

The "Byron General Surveillance File Listing," issued October 3, 1986, and the "Scheduled Surveillances for the Period of January 1, 1980 Through January 1, 1987," issued October 9, 1986, were reviewed for Unit 2 only. The inspector selected surveillance requirements from the technical specification and verified that the surveillance requirements had been adequately addressed, including appropriate test intervals.

Selected surveillance packages were reviewed by the inspector for completion and adequacy. The inspector noted that some Unit 2 surveillance procedures had not been issued. Schedules indicated that the surveillance procedures would be completed and issued before the actual need. The surveillance testing program appeared to be adequately controlled.

No violations or deviations were identified.

h. Procurement Control Program (35746)

The inspector reviewed the procurement control program to ensure that regulatory and QA program requirements were met. Byron administrative procedures for the control of purchasing and receiving inspection were reviewed. The procedures appeared to be acceptable and were implemented. During the review of selected samples of purchase orders, the inspector noted an incorrect part number on a purchase order for spare parts. During the licensee's review with the supplier of this item, four other part number errors were noted. The licensee was coordinating with the supplier to resolve this matter. Only one purchase order was involved; therefore, this was not considered a generic problem. Control of procurement activities appeared to be adequate.

No violations or deviation were noted in this area.

i. Receipt, Storage, and Handling of Equipment and Materials (34747)

The inspector reviewed the program for receipt, storage and handling of equipment and materials. Procedures appeared to be adequate and properly implemented. During this review the following items were noted:

- (1) The designation of material for Level A storage was not consistent. The same type of material (printed circuit cards) was designated for Level A and in Level B storage. This is an open item (455/86036-01).
- (2) In walking through inside storage areas the inspector observed that many parts were on open shelving without protection such as plastic covers or boxes. Printed circuit cards were covered with dust. The inspector noted that adequate protection was not provided for all types of parts in storage. The inspector also noted that housekeeping in the storage areas was not adequate. This is an open item (455/86036-02).
- (3) The inspector noted that many nonmetallic parts such as hoses and seals were not designated as having a limited life. One part (hose assembly SI 500 C 34) was reevaluated by the licensee after the inspector questioned the classification as a non-limited life item. The part was then designated as having a five year limited life. The inspector noted that many other items were not properly evaluated for limited life requirements. This item is unresolved pending further review on a subsequent inspection (455/86036-03).

No violations or deviations were identified; however, one unresolved item was noted.

j. Quality Assurance Records Program (35748)

The inspector reviewed the quality assurance records program for compliance with regulatory and quality assurance program requirements. Preoperational test records, turnover records, maintenance, surveillance and audit records were reviewed and record control practices appeared to be adequate. Quality records prepared by construction were not reviewed since none had been turned over to Operations at the time of the inspection. Unit 2 construction records will be turned over with Unit 1 records after construction activities are completed.

No violations or deviations were identified.

k. Test and Experiments Program (35749)

The inspector reviewed BAP 1310-8, "Special Procedures/Tests/ Experiments," Revision 2. The procedure provided for adequate control of tests and experiments. No Unit 2 tests and experiments had been performed.

No violations or deviations were identified.

l. Measuring and Test Equipment Program (35750)

The inspector reviewed the program for control of measuring and test equipment (M&TE) to verify compliance with regulatory and QA program requirements. The program was adequately documented by procedures that appeared to be properly implemented. The following observation was made:

The CECO QA Program provides for a minimum accuracy ratio of four to one to be maintained between an instrument being calibrated and the calibration standard(s). Where this ratio cannot be maintained, an evaluation is required to determine the acceptability of the M&TE equipment for the intended application. The inspector was informed that the four to one accuracy ratio had not been met in a number of cases. No evaluation records on these cases were available for the inspector's review. This is an open item (455/86036-04).

No violations or deviations were identified.

m. Preoperational Test Program Records (39301)

The inspector reviewed preoperational test records for proper preparation, completion, and review as well as proper storage and retrievability. Emphasis was placed on documentation, tracking and closing of open items.

The inspector selected eight system/subsystems, which had been released to operations, and reviewed the preoperational test records as well as the turnover packages and associated open items. The turnover packages were complete and properly approved; open items were noted and properly tracked with completion schedules assigned; and preoperational test records were completed and contained the proper reviews and approvals.

No violations or deviations were noted in this area.

3. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, violations or deviations. An unresolved item disclosed during this inspection is included in Paragraph 2.i.(3) of this report.

4. Open Items

Open items are matters that have been discussed with the licensee, which will be reviewed further by the inspector, and involve some action on the part of the NRC or licensee or both. Open items disclosed during this inspection are presented in Paragraphs 2.i.(1), 2.i.(2), and 2.1. of this report.

5. Exit Interview

The inspectors met with licensee representatives (denoted in Paragraph 1) on October 30, 1986, and summarized the purpose, scope and findings of the inspection. The inspectors discussed the likely informational content of the inspection report with regard to documents or processes reviewed by the inspectors during the inspection. The licensee did not identify any such documents or processes as proprietary.