

U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report No. 50-454/79-11; 50-455/79-11

Docket No. 50-454; 50-455

License No. CPPR-130; CPPR-131

Licensee: Commonwealth Edison Company
P. O. Box 767
Chicago, IL 60690

Facility Name: Byron Nuclear Generating Station, Units 1 and 2

Inspection At: Byron Site, Byron, Illinois

Inspection Conducted: July 3, 5 and 6, 1979

Inspector: *F.J. Jablonski for*
P. A. Barrett

8-1-79

Observer: S. B. Rapp

Approved By: *F.J. Jablonski for*
D. W. Hayes, Chief
Engineering Support Section 1

8-1-79

Inspection Summary

Inspection on July 3, 5 and 6, 1979 (Report No. 50-454/79-11; 50-455/79-11)

Areas Inspected: Licensee actions taken in regards to IE Bulletins; discussions on the implementation of the Hatfield QA program; the installation of an electrical penetration and electrical cables; and a review of the overall electrical construction status. The inspection involved a total of 15 inspector-hours onsite by one NRC inspector.

Results: No items of noncompliance or deviations were identified.

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DETAILS

Persons Contacted

Licensee Employees

- G. Sorensen, Project Superintendent
- *R. C. Aken, Electrical QA Coordinator
- *G. E. Smith, Lead Electrical Engineer
- *L. S. Combs, QA Inspector
- *M. A. Stanish, QA Engineer

Hatfield Electric Company

W. R. Gratza, Site QC Manager

Functional or Program Areas Inspected

1. Licensee Action on IE Bulletins, Units 1 and 2

In regards to the following bulletins, the RIII inspector observed 4160 volt switchgear Unit 1 buses No. 141, No. 142, No. 158, No. 159 and Unit 2 buses No. 241, No. 242, No. 258, and No. 259. The buses were either installed or stored in place.

a. Bulletin 76-02

There were no General Electric HFA, HGA, HKA or HMA relays installed on the above buses.

b. Bulletin 76-03

There were no General Electric STD transformer differential relays on the above buses.

c. Bulletin 76-05

There were no Westinghouse BFD relays installed on the above buses.

d. Bulletin 77-01

There were no ITE Imperial relays (Catalog Nos. J20T3/J13P20 and J20T3/J13P30) installed on the above buses.

e. Bulletin 77-02

There was approximately one Westinghouse AR relay on each of the above buses. The licensee stated that the AR relays did not have latch attachments.

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Licensee actions to assess the full scope of the above bulletins will be reviewed (including corrective actions) during a subsequent inspection. (454/79-11-01; 455/79-11-01)

No items of noncompliance were identified.

2. Implementation of the Electrical QA Program

The RIII inspector discussed, with the Hatfield Electric Company QA Manager, the established program to stop work when an uncontrolled condition warrants such action. The QA Manager stated that only one "Stop Work Order" had been issued to date. That order, dated April 30, 1979, was concerned with the calibration of torque wrenches which were used for the installation of concrete expansion anchors. For the QA Manager's memo of June 18, 1979, the stop work order was lifted.

The Hatfield QA Manager indicated that the implementation of the above order identified that the authorities of the Hatfield project manager and QA manager required clarification. Therefore, the authorities concerning stop work orders were more clearly defined. The QA manager will now initiate an order when deemed necessary and discuss the context (impact) with the project manager. Any conflicts in the initiation of stop work orders will be expeditiously resolved by the president of Hatfield Electric Company. Decisions concerning quality will be made independent of the impact of cost and scheduling.

No items of noncompliance were identified.

3. Observation of Electrical Work Activities

- a. The RIII inspector observed installed Unit 1 cables 1CC001 (5KV power) and 1CS019 (control). The raceway internals for the above cables were free of hazardous debris and sharp edges. Conduit bushings and cable supports (grips) were appropriately installed. The raceways were temporarily identified. The cables had no apparent damage. Cable No. 1CC001 was properly identified and routed in accordance with the Cable Pull Card. A Cable Installation Inspection Checklist, Form HP-101, was completed to document the QC verification of the installation requirements of cable No. 1CC001. Cable No. 1CS019 was incorrectly identified at both cable ends. The cable routing was as specified on the Cable Pull Card of cable No. 1CS019 except that the excessive cable, pulled to allow termination, extended into raceway which was not scheduled. The licensee stated that cable No. 1CS019 had been properly re-identified and reworked to the proper termination points, during the NRC inspection period.

The installation requirements of cable No. 1CS019 were not verified by QC and therefore were not documented. The Hatfield QA Manager stated that all safety related (Class 1E) cable installations were not required by the current procedure to be verified (inspected) by QC. No criteria had been established to identify which cables or cable installation activities would be inspected by QC. The Hatfield QA Manager also stated that the Cable Installation Procedure No. 10 was currently being revised. The licensee stated that instructions were currently being developed to revise the cable installation inspection requirements. Where necessary, cable installation inspection activities would be backfitted. The revised installation procedure, cable installation inspection requirements, and backfitting activities will be reviewed during a subsequent inspection. This matter is unresolved. (454/79-11-02; 455/79-11-02)

- b. The RIII inspector observed the complete in-process installation of electrical penetration No. 1AP85EA (including part of the final torquing of the flange bolts). The penetration was installed with care and precision in accordance with the step-by-step requirements of Conax Manual No. IPS-370, Rev. B, dated March 16, 1979. The penetration was located per Sargent and Lundy drawing No. 6E-1-3503, Rev. A. A Hatfield QC inspector was present during the installation activities. The inspection activities were documented on checklist Form HP-121.1, Rev. 0. Hatfield Nonconformance Report No. 66 dated July 6, 1979, was written to identify indentations in two of the penetration cables.
- c. The RIII inspector took a thorough tour of the Unit 1 and Unit 2 auxiliary buildings to assess the overall electrical construction status.

No items of noncompliance were identified.

Unresolved Items

Unresolved items are matters about which more information is required in order to determine whether they are acceptable items, items of noncompliance, or deviations. An unresolved item disclosed during the inspection is discussed in Paragraph 3.a.

Exit Interview

The inspector met with licensee representatives (denoted under Persons Contacted) at the conclusion of the inspection on July 6, 1979. The inspector summarized the purpose and findings of the inspection. The licensee acknowledged the findings reported herein.