

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Reports No. 50-454/85-07(DRS); 50-455/85-03(DRS)

Docket Nos. 50-454; 50-455

Licenses No. NPF-23; CPPR-131

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

Facility Name: Byron Station, Units 1 and 2

Inspection At: Region III Office

Inspection Conducted: February 5, 1985

Inspectors: R. Mendez *R. Mendez* 2/8/85
Date

A. S. Gautam *A. S. Gautam* 2/8/85
Date

Approved By: C. C. Williams, Chief *C. C. Williams* 2/8/85
Plant Systems Section Date

Inspection Summary

Inspection on February 5, 1985 (Report No. 50-454/85-07(DRS); 50-455/85-03(DRS))

Areas Inspected: Routine, announced inspection to review licensee action on previous inspection findings and a 10 CFR 50.55(e) report. The inspection involved 10 inspector-hours in the regional office by two inspectors.

Results: No items of noncompliance or deviations were identified.

DETAILS

1. Persons Contacted

Commonwealth Edison Co. (DECo)

*R. Klingler, Project QC Supervisor
*R. Poche, Licensing Engineer
J. J. Dennehey, Supervisor - Design Engineering

Sargent and Lundy Engineers (S&L)

T. R. Eisenbart, Project Engineer
M. M. Hassaballa, Senior Engineer
B. G. Treece, Senior Electrical Project Engineer
K. L. Adlon, Project Engineer

*Denotes those who participated in the exit meeting performed by telecon on February 5, 1985.

2. Licensee Action on Previous Inspection Findings

(Closed) Unresolved Item (50-454/84-63-01; 50-455/84-43-d): This item identified concerns regarding the effects on the seismic analysis when additional holes were drilled in the mounting channels of 125V DC distribution panels 1DC05E and 1DC06E.

The manufacturer, General Electric, responded to these concerns in their letter dated July 13, 1984, from Mr. H. J. Owen of G. E. to Mr. T. R. Eisenbart of S&L, in which G. E. stated that in any event these holes did not play a role in the seismic mounting of the MCC.

Based on this review, the item is closed.

(Closed) Unresolved item (50-454/84-17-04; 50-455/84-12-04): This item identified a concern regarding the appropriate torque values for the seismic bolting of electrical equipment to mounting channels. The licensee responded that the 'wrench tight' method of torquing bolts was adequate, however, they did not address the effect of this method on the seismic analysis of the equipment.

The licensee subsequently performed an analysis which stated that ... "the design of equipment mounting is based on the shear and tensile (vertical) resistance of the mounting attachment. In other words, no consideration was given to the friction developed between the equipment support and the foundation. Hence, preloading anchor bolts was not essential in the capability of the mounting to withstand loads under seismic conditions.

These justifications were documented on a letter dated December 27, 1984 from Mr. K. L. Adlon of S&L to Mr. T. Eisenbert of S&L; and on a letter dated September 24, 1984 from Mr. T. Eisenbart of S&L to Mr. D. Elias of CECO.

Based on this review, the item is closed.

3. 10 CFR 50.55(e) Report Followup

(Closed) 10 CFR 50.55(e) (454/79-02-EE; 455/79-02-EE): "Undetectable Failure in Engineered Safety Features Actuation System (ESFAS)". By letter dated November 7, 1979, Westinghouse identified an undetectable failure that could have potentially affected a circuit associated with Engineered Safeguards which was required for reactor protection. A failure analysis, assumed a failure of the circuit in both redundant protective trains and consequently, automatic initiation of the protective function could be lost under certain conditions. This particular problem pertained to the P-4 permissive, associated with the reactor trip and reactor trip bypass breakers, which provides an interlock in the ESFAS to control manual reset and blocks Safety Injection (SI). Westinghouse determined that although the ESFAS logic was required to be periodically tested, there were no procedures for checking the operation of the P-4 contacts or the interconnecting wiring. Therefore, Westinghouse concluded a potential failure of the P-4 contacts or the wiring would be undetected. An instruction attachment NS-TMA-2150 (which delineated corrective action) was sent to the licensee and required that the testing sequence be followed for each train of the Solid State Protection System (SSPS), with the plant at shutdown and the SSPS in normal operation.

The licensee implemented the vendor's instructions but determined that the voltage reading on a cleared P-4 input was 43 volts instead of 48 volts as called out by the procedure. The licensee presented an approved deficiency report, changing the voltage requirements from 48 to 43 volts. The differences in the voltages was apparently due to loading of an installed voltmeter across the P-4 contacts. Byron surveillance procedure 1BOS 3.1.2-12, revision 2, currently implements the Westinghouse instructions to verify the reactor trip breaker P-4 contacts. This matter is considered closed.

4. Exit Interview

A telecon exit was conducted by the inspector with licensee representatives denoted in Paragraph 1 on February 5, 1985. The inspectors summarized the scope of the inspection and the findings. The licensee acknowledged the information.