

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Reports No. 50-456/88009(DRS); 50-457/88010(DRS)

Docket Nos. 50-456; 50-457

Licenses No. NPF-72; NPF-75

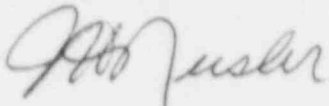
Licensee: Commonwealth Edison Company
P. O. Box 767
Chicago, IL 60690

Facility Name: Braidwood Station, Units 1 and 2

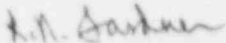
Inspection At: Braidwood Site, Braidwood, Illinois

Inspection Conducted: March 3-7, 1988

Inspectors: J. H. Neisler



3-28-88
Date

Approved By:  K. N. Gardner, Chief
Plant Systems Section

3/23/88
Date

Inspection Summary

Inspection on March 3-7, 1988 (Reports No. 50-456/88009(DRS);
No. 50-457/88010(DRS))

Areas Inspected: Special safety inspection to follow-up allegation
RIII 88-A-0009.

Results: No violations or deviations were identified.

DETAILS

1. Persons Contacted

Principle Licensee Employees

- *D. O'Brien, Services Superintendent
- *P. Barnes, Regulatory Assurance Supervisor
- *R. Preston, Director, Quality First
- *E. Carroll, Regulatory Assurance
- *T. Simpkin, Regulatory Assurance
- *K. Kofron, Production Superintendent
- *J. Jursenas, Quality Assurance
- M. Takaki, Regulatory Assurance
- S. Hedden, Master Instrument Maintenance
- P. Hart, Quality Assurance
- D. Kline, Store's Supervisor
- R. Vine, Technical Staff

*Denotes those personnel attending exit interview.

2. Allegation RIII-88-A-0009 (Closed)

Region III received correspondence from a former contractor employee at Braidwood concerning alleged deficiencies in instrumentation calibrations at Braidwood. The individual's concerns included supervisor qualifications, radiation monitor calibration and testing, uncontrolled substitution of parts, and the quality control and traceability of materials.

The individual had informed the Braidwood Quality First Team of his concerns subsequent to his contacting the NRC. The licensee investigated each of the individual's concerns prior to the NRC's inspection. Generally, the licensee's findings agreed with the NRC inspector's findings.

Each of the individual's concerns is addressed below:

Concern 1: Material tags marked "Quality Assured" buried in the ice outside the main access to the plant.

The individual stated in his January 4, 1988 letter that for the last three days he had observed what he understood to be material identification tags in the ice outside the plant main access.

NRC Review: Through discussions with Braidwood Quality Assurance personnel and review of appropriate documentation, the inspector determined that the Quality Assured material tags had been identified in QA audit QAA-20-88-44, Finding No. 4, dated January 4, 1988. The loose tags had originally been taped to oil drums stored approximately

50 yards west northwest of the main plant access. The inspector found other tags on the ground near the fenced oil storage area. The licensee has changed from paper tags taped to the drums to metal tags tied to the drums with wire so they will not be affected by inclement weather. Material traceability was not affected.

Conclusion: This concern was substantiated in that loose Quality Assured tags were found on the ground west of the main access; however, they had been previously identified by the licensee's QA program, and corrective action was complete.

Concern 2: Using unqualified components in applications that require qualified components. The allegor indicated that temperature switches in the pump rooms' HVAC units had missing components and were not properly installed.

NRC Review: The licensee had investigated this concern. The inspector reviewed the results of the licensee's investigation which included a walkdown of temperature switches in all the pump room HVAC units for proper installation and environmental qualification requirements. The walkdown identified that the as-installed switches met requirements.

In addition, the inspector reviewed the installation procedures and installation drawings to determine if the switches met the installation and environmental requirements of drawing 20E-0-3391AN. The switch mountings were as shown on the drawing. Procedure BWIP 2400-111A8a, Revision 0, dated September 19, 1986, Step B.2.c., requires a switch assembly lock nut to be torqued to 60 inch-pounds. This was the procedure used by the allegor. Temporary Change Notice TCN-1006, issued February 16, 1987, approved, per the architect/engineer, for extended use, switch assemblies without lock nuts. The United Electric switch assemblies, installed according to detail 6778 of drawing 20E-0-3191AN, Revision S, do not require lock nuts. Apparently, the allegor's supervisor did not inform the allegor of TCN-1006.

Conclusion: The individual's statement that some temperature switch assemblies were installed without lock nuts is correct; however, drawings and procedures do not require all switches to have the lock nuts. This concern was not substantiated.

Concern 3: Unqualified batteries installed in area radiation monitoring cabinets. The allegor stated that he was directed to install batteries that did not have qualification documentation in the area radiation monitoring cabinets.

NRC Review: By observation and review of parts classification lists and Sargent and Lundy's QAF assignment request, the inspector determined that the batteries were not safety related since the radiation monitoring cabinets normal power supply is a Class 1E system. The battery is described on the parts list as battery assembly, 4V 5AH, for Process/Area radiation monitor "no substitution." The manufacturer, G. A. Technologies, did not list the battery assembly, Part No. 0357-1815-001 for model RM-80, as safety related. In addition, the inspector determined that the batteries are not installed in harsh environments.

Conclusion: There were no requirements for qualification documentation on the GA Technology model RM-80 radiation monitor battery assembly; therefore, this concern was not substantiated.

Concern 4: Inadequate calibration of AR/PR skids. The alleged questioned the calibration methodology of the radiation monitoring skids, specifically the high range monitors.

NRC Review: The inspector reviewed the calibration procedures for radiation monitors used at Braidwood which are identified as GA models RD-23, RD-80, and RD-10B. Also, the inspector reviewed the program for replacement and refurbishment of calibration sources. Since each source has a finite half-life, the licensee's health physics group periodically measures the source strength. Once the source decays to a pre-determined level, it is replaced with a new source and returned to the manufacturer for refurbishment or is disposed of, according to NRC regulations.

The method of calibrating the high range monitors was questioned. The monitors are calibrated at one RAD and 12 RAD, then electronically calibrated to 10,000 RAD. This is the method of calibration outlined in NUREG-0737 for the high range radiation monitors.

Conclusion: The licensee's procedures comply with NRC requirements, therefore, this concern was not substantiated.

Concern 5: Unqualified supervisors. The alleged stated that a foreman and a general foreman were not qualified to be supervisors.

NRC Review: The inspector discussed the qualifications of the named supervisors with licensee management. The licensee produced evidence that the foreman had been demoted and the general foreman terminated from employment at Braidwood because of their lack of supervisory or managerial capabilities. The licensee's evaluation of their activities determined that plant safety was not affected.

Conclusion: Based on the licensee's actions in removing the individuals from their supervisory positions, this concern was substantiated. Review of the licensee's evaluation of their activities determined that plant safety was not affected.

Concern 6: Calibration of temperature switches in the personnel and equipment hatches. The alleged stated that the switches, when calibrated in a temperature bath, would not function as designed when placed in the system.

NRC Review: The inspector reviewed Procedure BwIP 2505-007, preoperational test procedures PR-10 and PR-50, and deficiencies PR-50-008, PR50-990, PR-10-022. The alleged had written an instrument deficiency report (IDR) stating the problems with calibrating the temperature switches outside the system as required by the procedure. The IDR was given to his supervisor who forwarded it to the licensee. The procedure was subsequently changed by TCR-004 to require in-site calibration of the temperature switches using a heat gun and reference thermometers. Upon successful completion of the test, the IDR was closed. The alleged was not informed of the change in procedure by his supervisor.

Conclusion: The inspector determined by review of the above data that the alleged was correct in that the calibration procedure was inadequate as originally issued. However, the licensee's program corrected the procedure. Therefore, this allegation was not substantiated.

Concern 7: Improper sign-off of deficiency AF-50-088. It was alleged that the deficiency was closed before all deficient items (gage 2PI-AF124) were corrected.

NRC Review: The inspector reviewed deficiencies AF-50-088, AF-50-180, and the Braidwood safety related component list. Pressure indicator 2PI-AF124 is a non-safety related gauge that measures gear box oil pressure on auxiliary feed pump 2B. AF-50-088 identified a broken bezel on 2PI-AF124. The gauge was replaced with another gauge with a different scale. AF50-088 was closed on May 17, 1987. The licensee then issued deficiency AF50-180 to identify and correct the scale on 2PI-AF124. The scale was corrected, the instrument was calibrated on August 28, 1987, and AF50-180 was closed on August 31, 1987. The inspector found no current deficiencies relative to this instrument.

Conclusion: The inspector determined that AF50-088 had been signed off with a deficiency in the installation; however, the

licensee's program identified the problem and performed the necessary corrective action. This concern was not substantiated as affecting plant safety.

Concern 8: Wrong length thermocouples installed in circulating water system. The alleged stated that 14 inch long thermocouples were installed as replacements for 28 inch long thermocouples in the circulating water pumps.

NRC Review: The circulating water system at Braidwood is not classified as a safety-related system. The inspector verified that under length thermocouples were installed in the pumps. A deficiency had been initiated, and at the time of this inspection, the installed thermocouples were being reviewed for acceptability by the architect/engineer, Sargent and Lundy.

Conclusion: This concern was not substantiated as pertaining to a safety-related system. The licensee followed the quality program for non-safety-related components.

3. Exit Interview

The inspector met with licensee representatives at the conclusion of the inspection and summarized the scope and findings of the inspection. The licensee acknowledged the inspector's comments. The inspector also discussed the likely informational content of the inspection report with regard to documents or processes reviewed during the inspection. The licensee did not identify any such documents or processes as proprietary.