Commonwealth Edison
Quad Cities Nuclear Power Station
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Telephone 309/654-2241

GGC-94-086

May 23, 1994

U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Document Control Desk

Subject: Quad Cities Power Station Units 1 and 2;
NRC Docket Number 50-254 and 50-265;
NRC Inspection Report Numbers 50-254(265)/94005

Reference: E. Greenman letter to E. Kraft dated April 22, 1994,
transmitting Notice of Violation.
Inspection Report 50-254/94005; 50-265/94005

Enclosed is Commonwealth Edison's response to the Notice of Violation (NOV) transmitted with the referenced letter. The NOV cited a Level IV violation concerning the development and adherence to a calibration procedure for the feedwater transmitters.

The following commitments are being made by this letter:

1) NETS will evaluate and calculate a new calibration range for the feedwater flow transmitters. The new calibration range will include static pressure correction factors. Instrument Maintenance Department (IMD) will calibrate the Unit 1 and 2 feedwater flow transmitters to the new range specified by NETS. The calibration data will be submitted for inclusion into the engineering controlled Instrument Database with a remark that the calibration data includes static pressure correction. **Due date July 29, 1994.**

2) Site Engineering and Construction (SEC) and NETS to review design change process and ensure methodology and responsibility are defined for determination of instrumentation scaling. This review will ensure that the design change process includes provisions for review and incorporation of key vendor information into the design where applicable. **Review will be completed in 90 days with recommendations documented and implemented as needed.**

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3) IMD will develop procedures for feedwater flow loop calibration. These procedures will be validated during the Unit 2 Refuel Outage. **Due date completed prior to Unit 2 startup.**

If there are any questions or comments concerning this letter, please refer them to Nick Chrissotimos, Regulatory Assurance at (309) 654-2241, extension 3100.

Respectfully,

for G. G. Campbell
Station Manager
Quad Cities Station

GGC/RB/kjv

Attachment

cc: J. Martin, Regional Administrator, RIII
C. Patel, Project Manager, NRR
C. Miller, Senior Resident Inspector, Quad Cities

STATEMENT OF VIOLATION:

10 CFR 50, Appendix B, Criteria V, "Instructions, Procedures, and Drawings" requires, in part, that activities affecting quality shall be prescribed by documented instructions or procedures, shall be accomplished in accordance with the instructions or procedures, and that the instructions or procedures shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished.

Contrary to the above, the licensee failed to develop adequate procedures for calibrating feedwater flow transmitters which are used in determining reactor thermal power, and failed to properly calibrate these transmitters following installation between the period of November to December 1993.

REASON FOR VIOLATION

CECo acknowledges the violation. The reason for this violation was due to an inadequate procedure caused by a deficiency in the design process for determination of the feedwater flow transmitter calibration range (scaling), including the effects of static pressure. The design process deficiency was due to lack of implementation of vendor and GE Sil 452, supplement 1 information.

CORRECTIVE ACTIONS TAKEN AND RESULTS ACHIEVED

The following is a list of the corrective steps to be taken:

Short Term

1) Static pressure measurements along with transmitter input/output verifications through to the process computer will be performed, with the data being submitted to Nuclear Engineering and Technical Services (NETS). **(COMPLETED)**

2) NETS will evaluate and calculate a new calibration range for the feedwater flow transmitters. The new calibration range will include static pressure correction factors. Instrument Maintenance Department (IMD) will calibrate the Unit 1 and 2 feedwater flow transmitters to the new range specified by NETS. The calibration data will be submitted for inclusion into the engineering controlled Instrument Database with a remark that the calibration data includes static pressure correction. **Due date July 29, 1994.**

3) IMD will ensure that the feedwater flow transmitters are included into the stations surveillance tracking

system (GSRV) and calibrated on a once every outage frequency. **(COMPLETED)**

4) IMD along with System Engineering will develop a lesson learned report for distribution across the company network. **Due Date July 1, 1994.**

5) This item will be "tailgated" for the following departments at Quad Cities Station: System Engineering, IMD and Site Support Engineering. **Due Date July 1, 1994**

6) A problem identification form (PIF) was generated and will be assigned to NETS for evaluation of static pressure effects on other differential pressure instrument channels. **(Completed - Reference PIF # 94-1280).**

Long Term

1) Site Engineering and Construction (SEC) and NETS to review design change process and ensure methodology and responsibility are defined for determination of instrumentation scaling. This review will ensure that the design change process includes provisions for review and incorporation of key vendor information into the design where applicable. **Review will be completed in 90 days with recommendations documented and implemented as needed.**

2) IMD will develop procedures for feedwater flow loop calibration. These procedures will be validated during the Unit 2 Refuel outage. **Due Date completed prior to Unit 2 startup.**

3) Regulatory Assurance will review the station's OPEX information mechanism to ensure the mechanism provides appropriate guidance for adequate responses to OPEX items. **Due Date August 31, 1994.**

4) System Engineering will review all safety related SILs issued since 1988 in accordance with Regulatory Assurance's effectiveness review program. (**Note:** A review of GE SILs generated prior to 1988 is currently in progress with a targeted completion date of March 1, 1995. Reference NTS #254-455-94-Review.sils) **Due Date March 1, 1995.**

Corrective Actions to Prevent Further Occurrence:

The actions above, when completed, will be considered sufficient to preclude future violations.

Date when full compliance will be achieved:

Full compliance with this violation will be met when IMD completes the calibration of the feedwater flow transmitters to the new range specified by NETS by the end of the current Q1R13 refuel outage.