Appendix A

NOTICE OF VIOLATION

Commonwealth Edison Company Docket No. 50-373

As a result of the inspection conducted on May 19-22, 29 June 2-5, 11, 12, 16, 17, 23, 24, 30 and July 1-2, 1981, and in accordance with the Interim Enforcement Policy, 45 FR 66754 (October 7, 1980), the following violations were identified:

1. 10 CFR 50, Appendix B, Criterion III, requires that measures be established to assure that applicable regulatory requirements and the design basis, as defined in Paragraph 50.2 and as specified in the licensee application, for those structures, systems, and components to which Appendix B is applicable, are correctly translated into specifications, drawings, procedures and instructions. The QA Manual, Quality Requirement 3.0, Section 3.1 states that, "The extent of the design review and evaluation of the original designs and modifications will be determined by the complexity of the system and any safety-related function to be performed by that system. Design evaluation of modifications will be commensurate with those applied to the original design. Review and evaluation by the Architect Engineer, the Nuclear Steam Supply System vendor, and/or the Project Engineering or the Station Nuclear Engineering Department, as well as by other CECo organizations, and specially qualified people, such as Level III's for NDE and for concrete inspection and tests, will assure that designs, specifications and procedures will conform to the ASME and other applicable codes, standards, regulatory requirements, SAR commitments and appropriate quality standards, as applicable."

   Contrary to the above:

   a. The design of the diesel generators does not guarantee that the capability to supply reliable emergency power, within the required time, is not impaired during periodic testing of the diesel generators. As a result the preoperational tests of diesel generators 1A and 0 did not include a demonstration of this capability as required by Table 14.2-38 of the FSAR.

   b. The fuel day tanks for each fire diesel pump were designed with a capacity for only 550 gallon instead of the 750 gallon capacity stated in Section 9.5.4.3 of the FSAR.

   c. The design of the load sequencing for several safety related loads is not in accordance with FSAR Table 8.3-1, "Loading of 4160 volt ESF Busses."

   This is a Severity Level IV violation (Supplement II).

2. 10 CFR 50, Appendix B, Criterion V, requires that procedures include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished.

   10 CFR 50, Appendix B, Criterion XI, requires that test results be evaluated to assure that test requirements have been satisfied. The QA Manual, Quality Requirement 11.0, Section 11.3 requires that test results be evaluated following each test to assure conformance with design and performance requirements.

   Contrary to the above:

   a. The licensee wrote an acceptance criteria, approved it, performed the test, and reviewed and approved the test results for PT-DO-101 and 201, regarding the low level alarm for the diesel generators fuel storage tanks, all of which allow the amount of stored fuel to fall below the minimum requirements specified in the FSAR.

   b. The licensee wrote an acceptance criteria, approved it, performed the test, and reviewed and approved the test results of PT-DO-101 and 201, regarding the low level alarms and high level pump cutoff for the diesel fire pump day tanks, all of which allow the amount of stored fuel oil to be less than that required to fight a fire and ignore the fuel consumption in the determination of the minimum 7-day fuel storage requirements for the HPCS system, as stated in the FSAR.

   This is a Severity Level IV violation (Supplement II).

3. 10 CFR 50, Appendix B, Criterion XI, requires that a test program be established to assure that all testing required to demonstrate that systems and components will perform satisfactorily in service is identified and performed in accordance with written test procedures which incorporate the requirements and acceptance limits contained in applicable design documents. The QA Manual, Quality Requirement 11.0, Section 11.2 requires that written test procedures be developed to demonstrate design and performance characteristics as specified in design and operating requirements.

   Contrary to the above, PT-DG-101A did not include testing of the diesel generators 1A and 0 to ensure that each starting air subsystem (two air start motors) has enough air storage capacity for a minimum of five normal cranking cycles in rapid succession without the use of the air compressors, assuming the redundant subsystem failed to operate, as stated in FSAR Section 9.5.6.1.1.

   This is a Severity Level V violation (Supplement II).

4. 10 CFR 50, Appendix B, Criterion XII, requires that measures be established to assure that instruments used in activities affecting quality be properly controlled, calibrated, and adjusted at specified periods to maintain accuracy within necessary limits.

Commonwealth Edison Company QA Manual, Quality Requirement No. 12.0 Paragraph 12.1 requires that measuring and test equipment which is used to perform the preoperational testing and to ascertain the proper indications in the operation of generating station equipment will be periodically calibrated or adjusted to assure that accuracy is maintained within necessary limits in order to verify design requirements. Paragraph 12.3 requires that history records for measuring and test equipment be used to indicate calibration status, condition, correction to be applied and repair events.

SU 300-4, Revision 3, Step F.2.b.(3), requires the Test Engineer to ensure that required test equipment is calibrated and will be available and that any required calibration data is available."

Contrary to the above, wattmeter No. 2JI-DG069 used at the local control panel for diesel generator 2A was not properly calibrated on March 12-13, 1981, nor was its calibration assured by the Test Engineer; and records of its calibration, including required correction to be applied, were not maintained. As a result the diesel generator was inadvertently overloaded up to 126% of rated power during subsequent testing.

This is a Severity Level V violation (Supplement II).

5. 10 CFR 50, Appendix B, Criterion XV, requires that measures be established to control materials, parts, or components which do not conform to requirements in order to prevent their inadvertent use or installation. The QA Manual, Quality Requirement No. 15.0, Section 15.3 states, in part, that, "items which are found to be nonconforming to design and specification requirements or workmanship standards will be positively identified and uniquely segregated or handled as nonconforming to prevent their inadvertent use."

LSU 100-2, Revision 10, Step F.1.e, states that, "After the release boundaries are agreed upon, Station Construction and Site QA shall make a detailed verification of all items in the System and Equipment List for completeness, conformance to specification, and receipt of required documentation. Deficiency Reports shall be prepared for all deficient conditions in accordance with LSU 200-1, Pre-Turnover Deficiencies."

Contrary to the above during 1980 the licensee failed to identify in a nonconformance or deficiency report either at the time of installation or at the time of system turnover, the installation of a wattmeter with the incorrect calibration units on the local panel of diesel generator 2A.

This is a Severity Level V violation (Supplement II).

Pursuant to the provisions of 10 CFR 2.201, you are required to submit to this office within thirty days of the date of this Notice a written statement or explanation in reply, including for each item of noncompliance: (1) corrective action taken and the results achieved; (2) corrective action to be taken to avoid further noncompliance; and (3) the date when full compliance will be achieved. Under the authority of Section 182 of the Atomic Energy Act of 1954, as amended, this response shall be submitted under oath or affirmation. Consideration may be given to extending your response time for good cause shown.

AUG 21 1991
Dated

C. E. Norelius

C. E. Norelius, Director
Division of Engineering and
Technical Inspection