Commonwealth Edison
One First National Plaza, Chicago, Illinois
Address Reply to: Post Office Box 767
Chicago, Illinois 60690

April 17, 1979

Mr. James G. Keppler, Director
Directorate of Inspection and
Enforcement - Region III
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Subject: LaSalle County Station Unit 1
Response to IE Inspection Report
No. 50-373/79-06
NRC Docket No. 50-373

Reference (a): R. F. Heishman letter to Byron Lee, Jr.
dated March 19, 1979

Dear Mr. Keppler:

Mr. R. F. Heishman's letter to Mr. Byron Lee, Jr., Reference (a), identified three apparent items of noncompliance in the Notice of Violation, Appendix A to the letter. One of the apparent items of noncompliance contained two parts, 1.a and 1.b.

Pursuant to the provisions of Section 2.201 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, Commonwealth Edison's response to noncompliance 1.b of the Notice of Violation is contained in the attachment to this letter.

We have carefully reviewed the circumstances relating to the other apparent items of noncompliance cited in the Notice of Violation (Items 1.a, 2, and 3). Our judgement is that our activities in these instances did not constitute noncompliance to requirements. Our review of these matters is also contained in the attachment to this letter.

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We request the opportunity to discuss these matters with you at your earliest convenience.

Upon request by this office on April 6, 1979, the date of response to the subject inspection report was extended from April 10, 1979 to April 20, 1979 by Mr. R. Walter of your staff.

Very truly yours,

C. Reed

Cordell Reed
Assistant Vice-President

attachment

ENCLOSURE

COMMONWEALTH EDISON
RESPONSE TO NOTICE OF VIOLATION

Items of apparent noncompliance identified in Appendix A to the NRC letter dated March 19, 1979 are responded to in the following paragraphs.

1. 10 CFR Part 50, Appendix B, Criterion V states, in part, that, "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures or drawings." Quality Procedure 11-2 states in Section 5.4 that, "Station staff under the direction of the Station Superintendent will operate equipment and systems in accordance with approved operating procedures and as required by the Preoperational or Startup Test Procedures." Startup Manual Procedures LSU 500-1 and and LSU 500-2 in Sections F.1, F.7, F.9 and F.1 and F.2 respectively require, in part, that deviation from test procedures is not authorized, steps within a procedure segment may not be reordered unless done so with an approved procedure change and any time the deviation changes the intent of the test procedure, the deviation will be processed for test procedure change approval. Administrative Procedure LPA 900-4, Revision 6 and Construction Instruction 1-2-G-1 require in part, that when construction has progressed to the point where equipment being worked on could be livened from a source under the jurisdiction of the Generating Department, then the CECo. supervisor in charge of the construction work must request that the OUT OF SERVICE cards be used in accordance with the above mentioned procedures.

   a. Contrary to 10 CFR Part 50, Appendix B, Criterion V, Quality Procedure 11-2, and Startup Manual Procedures LSU 500-1 and LSU 500-2 above, on October 13, 1978, the preoperational test (PT-AP-102) on the 250 VDC batteries was continued but the acceptance test was terminated without the licensee making an approved change to the procedure when the terminal voltage reached 217 volts instead of 210 volts as required by Step 10.3 B.h and the acceptance criteria.

RESPONSE

Commonwealth Edison does not believe this item of noncompliance to be justified. Preoperational tests are conducted to verify that a system functions as designed and to identify any problems associated with a given system. In light of these objectives, it has always been our intent to allow a preoperational test to continue, without requiring a test procedure change, even though the results of a given step may not have been exactly as expected or the acceptance criteria may not have been satisfied. The System Test Engineers (STEs) are instructed to evaluated each such deviation from the test procedure for potential damage to equipment and potential for invalidating subsequent testing. the STEs are also instructed to record all deviations of this nature in Section 13.0 of the test procedure, "Evaluation of Test Results," for review by the onsite review function and the Station Nuclear Engineering Department.

The deviation cited for the DC Distribution Pre-operational Test, PT-AP-102, was of this nature. The STE followed the procedure in the exact sequence prescribed, without skipping any procedure steps. The deviation occurred in step 10.3.B.1.h, which states, "Maintain the discharge rate until the battery terminal voltage falls to 210 VDC." When battery terminal voltage reached 217 VDC, the STE noted that several cells were approaching the point where polarity reversal was possible. Since an eight-hour discharge had already been completed as required by IEEE Std 450-1975, the STE terminated the test discharge at approximately ten (10) hours. It was determined that verification of additional margin did not merit risking damage to the batteries.

Moreover, the action taken by the STE did not constitute a "change" to the procedure because at the time the test was terminated the test objective had been satisfied without violating any acceptance criteria. The inspector's conclusion that the test procedure's acceptance criteria calls for a terminal voltage of 210V is in error. Data Sheet 12.1.a clearly identifies 210V as the acceptance criteria for minimum terminal voltage, the value below which battery terminal voltage may not fall. The STE made a note at step 10.3.B.1.h, referring the reader to Subsection 13.1 of the test procedure and continued with the next step in the test procedure. The subsequent steps of the procedure that were completed included: (1) disconnecting the test device, (2) checking

electrolyte level, (3) calculation of battery capacity, and (4) conducting an equalizing charge in accordance with the appropriate operating procedure. All of these steps could be summarized as returning the battery to its normal configuration and are not judged to be significant.

As has been stated, it is Commonwealth Edison's position that the STE handled this situation properly and that a procedure change was not required. Where it is determined that continuation of testing will not result in equipment damage or invalidation of test results, it is common practice and technically justified to continue preoperational testing even though the results from a given procedure step are not as expected. In some cases, especially when a component fails to meet its acceptance criteria, a procedure change may not be appropriate, and resolution of the deficiency may require a significant period of time. It makes no sense to stop the test until the deficiency is resolved. It is advisable in such cases to continue testing in order to identify any additional deficiencies with the knowledge that portions of the test may have to be repeated.

LSU 500-1 has been clarified to more clearly identify the criteria for proceeding with preoperational testing when a situation of this nature occurs.

1. b. Contrary to 10 CFR Part 50, Appendix B, Criterion V, Quality Procedure 11-2, Administrative Procedure LAP 900-4, and Construction Instruction 1-2-G-1, on January 10, 1979, the licensee's contractor cut into RHR line 1RH26AA-4"to remove a spool piece without using the Out of Service Procedure.

CORRECTIVE ACTION TAKEN AND RESULTS ACHIEVED

The responsible CECo. field engineer reviewed the status of the RHR system prior to authorizing the removal of the temporary spool piece in line 1RH26AA-4" for the installation of valve 1E12-P065A. Both the R_x vessel and the suppression pool were drained leaving no suction for the RHR pumps. The system status was also reviewed by the Morrison Const. Co. supervisor in charge of the work.

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Discussion with the Morrison Construction Co. supervisor indicates that there was water in line 1RH24AA-4" when it was out -- water sprayed from the pipe onto a RHR pump motor and instrument panel. The RHR pump motor was meggered afterward and found acceptable. The instrument panel was also examined and no damage found.

Prior to the January 10 removal of the temporary spool piece in line 1RH26AA-4", the Field Engineers had been instructed to use the Out of Service Procedure.

The Field Engineer responsible for authorizing removal of the temporary spool piece in line 1RH26AA-4" on January 10 has been instructed again in the need to review the status of the complete system before deciding whether or not the Out of Service Procedure is required to protect personnel or equipment.

CORRECTIVE ACTION TO AVOID FURTHER NONCOMPLIANCE

All Field Engineers with the authority to authorized work on systems or equipment which has been livened have been instructed again to use the Out of Service Procedure to protect personnel and equipment. A Station Construction memo from W. H. Donaldson, which reviews and emphasizes this policy was issued on April 10, 1979.

DATE OF FULL COMPLIANCE

Full compliance has been achieved as of the date of this letter.

2. 10 CFR Part 50, Appendix B, Criterion XIV, states in part that, "Measures shall be established to indicate, by use of markings such as stamps, tags, labels, routing cards or other suitable means, the status of inspections and tests performed, ... These measures shall provide for the identification of items which have satisfactorily passed required inspections and tests, where necessary to preclude inadvertent bypassing of such inspections and tests." Q.A. Manual Quality Requirement 14.0 states, "This system will also provide for indicating the quality or operating status during construction and plant operations. Markings, tags, labels, forms, log books, or other suitable means are used to identify, ... to preclude inadvertent bypassing of the inspections and tests required prior to their use."

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Contrary to the above, the licensee had not established a method to indicate the status of a system or part of a syster after it has met the cleanliness tests performed to meet the requirement of the flushing procedures.

RESPONSE

The CEC . Startup group has records showing the flushing status of each system. These records consist of a file for each system with a log book of forms showing the flow paths to be flushed. The log contains entries for planning and documenting the flush of each flow path. One space is for a signed entry showing that the flow path was flushed and the acceptance criteria satsified. The file also contains a marked up P&ID depicting each flow path and colored to indicate those which are complete.

When a system is to be turned over from construction to operating, the status of the system, including the status of flushing, is reviewed. The turnover package is reviewed by Quality Assurance, thus assuring that a system has been flushed if required prior to turnover to operations.

This system was established and functioning prior to the NRC inspection of January 30-31, February 1 and 7-8, 1979 reported in NRC Report Docket No. 50-373. Therefore, item 2 in Appendix A to the NRC letter Docket No. 50-373 dated March 19, 1979 does not identify a noncompliance.

3. 10 CFR Part 50, Appendix B, Criterion XI, states "A test program shall be established to assure that all testing required to demonstrate that structures, 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." QA Manual Quality Requirement No. 11.0 states in Section 11.2 that, "Written test procedures will be developed to demonstrate designs and performance characteristics as specified by design and operating requirements. The procedure will include, ... and state the data to be obtained and requirements and acceptance limits to be fulfilled."

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Contrary to the above, Preoperational Test Procedure PT-AP-102 for DC Distribution did not provide for specific gravity corrections for changes in the electrolyte level as recommended in battery manufacturer's instruction manual referenced in Section 4.7 of the procedure.

RESPONSE

Commonwealth Edison does not believe this item of noncompliance to be justified. We have reviewed all applicable regulations and commitments and find no requirement to correct specific gravity for changes in electrolyte level. The battery manufacturer's instruction manual states that "... when taking hydrometer readings, the electrolyte level referenced to the high level line should be recorded for proper evaluation of the specific gravity value." It should be noted that this recommendation is worded in non-mandatory language. This position was [illegible]ified by Mr. M. A. Todd, the Division Training Manager for G[illegible] Inc., the battery manufacturer. Mr. Todd has indicated tha[illegible] "the need for such correction of readings is optional; it only provides for more accuracy in determining precise full charge gravity readings of a cell.

The requirement to correct specific gravity for changes in electrolyte level was not included in the D.C. Distribution Preoperational Test, PT-AP-102, due to the fact that both the manufacturer's field representatives and the Commonwealth Edison Station Electrical Engineering Department had stated that this correction was unnecessary. In as mush as the objective of the eight hour discharge test is to demonstrate the ability of the battery to deliver its rated ampere hours before reaching rated final terminal voltage, the correction of specific gravity is superfluous if the rated output is delivered. Moreover, in the case of the preoperational test (PT-AP-102) on the 250 VDC batteries at LaSalle, the rated output was maintained well beyond the eight hour discharge test requirement.

Preoperational Test Procedure PT-AP-102 for DC Distribution is considered to be complete and in conformance with instructions provided by the battery manufacturer. Therefore, the condition discussed in item 3 of the subject Inspection Report does not constitute a noncompliance.

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