Commonwealth Edison Company
ONE FIRST NATIONAL PLAZA ★ CHICAGO, ILLINOIS
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DR Central File

50-237

July 12, 1971

Mr. Lawrence D. Low, Director
Division of Compliance
U. S. Atomic Energy Commission
Washington, D.C. 20545

Dear Mr. Low:

The purpose of this letter is to present our responses to the items of noncompliance with regulatory requirements which were enclosed with your letter of June 21, 1971. Our responses for the individual items listed in your enclosure are as follows:

1.a. Commonwealth Edison has relied upon procedures in vendor manuals for maintenance of reactor instrumentation and electrical systems. We are presently preparing our own preventative and corrective maintenance procedures which will incorporate references to the latest vendor manuals. We expect these procedures to be completed by November 1, 1971.

1.b. An out-of-service procedure for the high pressure coolant injection system (contained in Chapter 21, Book 2, Procedure 2300 I) was approved by the Station Review Board on October 13, 1970, and signed by the Station Superintendent. This procedure was subsequently revised and approved by the Station Review Board along with other operating procedures on November 2, 1970 and April 13, 1971.

2.a. The installation of the main steam isolation valve air supply filters was presented to the Station Review Board on December 18, 1970 by representatives of station management who had reviewed the proposed installation and evaluated its safety consequences. A written safety evaluation was not prepared for the filter installation because the Station Review Board did not consider the installation to be a change to the main steam isolation valve system as described in the FSAR.

2.b. The modification to the electromatic relief valves was presented to the Station Review Board on October 5, 1970 after an evaluation by the station management. The purpose of this modification was primarily a material change to increase the performance reliability of the electromatic relief valves. Therefore, no written safety evaluation was prepared.

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2.a.&b. To preclude the possibility of future plant modification without a written and approved safety evaluation in accordance with 10 CFR 50.59, the Station Review Board has instituted a procedure covering the evaluations of such modifications.

3. The daily surveillance sheets being used by the station required recording of the magnitude and location of the highest LPRM chamber. This is the normal method used to check peak heat flux as stated in the Technical Specification Basis Paragraph 4.1.B. The daily surveillance sheet did not specify an allowable limit.

The daily surveillance sheets were revised to include the magnitude at which the station operator is required to notify the shift engineer.

4. The inoperability of the main steam isolation valves during the period of October 27 to November 4, 1970 was reviewed by the Nuclear Review Board at its meeting on November 4, 1970. The NRB decision and recommendation were reported to Mr. T. G. Ayers, President of Commonwealth Edison, in the minutes of that meeting. Therefore, we believe the activity identified in this item was conducted in accordance with the Dresden Unit 2 Operating License.

To assure that future items of non-compliance undergo NRB review and recommendation, all future AEC Form-592's will be assigned an action item number and will be put on the list of action items. These items will be reviewed expeditiously and reported in writing as required. This new procedure will be initiated as of this date.

5. The reactor core flux asymmetry condition was noted as a result of LPRM calibrations during April and May 1970. The item was discussed by Commonwealth Edison station management and General Electric site management. A program was instituted to pursue the cause of the possible asymmetries and to determine their magnitude. Reactor power and linear heat flux were determined directly from instrumentation and variation in power represented by core asymmetries are taken into account. Operating limits on MCHFR and linear heat generation were never exceeded.

The reactor was shutdown June 5 to August 4, 1970. Previous indications were that some LPRM assemblies had low sensitivity and were not providing reliable information. During the shutdown period, select LPRM assemblies were replaced. Selection of the locations in which to replace the monitors was based on maximizing the information to be gained about the possible power asymmetry indications.

A procedure was presented at the SRB meeting No. 40 on August 1, 1970 which was designed to investigate core asymmetries by pulling "local" criticals in various areas of the core. This procedure was approved at SRB meeting No. 41 on August 3, 1970. This review by the SRB occurred prior to the startup of the unit.

Meanwhile, the situation was being studied in detail by the General Electric Company and possible mechanisms for the power asymmetry were investigated. General Electric concluded that the most likely mechanism was due to inlet water temperature asymmetries. The SRB again reviewed the problem at its September 11, 1970 meeting and approved a special test to demonstrate core asymmetry effects due to inlet temperature variations.

A special report No. 6, dated March 17, 1971, was sent to the AEC by Commonwealth Edison, followed by a supplemental report No. 6 dated May 13, 1971. As stated in the report, there is not (and never has been) a safety problem involved with the core asymmetry for the following reasons:

> Reactor power and linear heat flux are determined directly from instrumentation and therefore variations in power represented by core asymmetries are taken into account.
>
> The calculated MCHFR will always be less than the actual MCHFR and thus the calculations are in the conservative direction and ensure adequate margins for all calculated transients and postulated accidents.

Dresden 3 has undergone a feedwater sparger modification in an attempt to correct the inlet temperature variations. The Dresden 2 feedwater sparger may be modified if the results of the Dresden 3 feedwater modification show positive results.

6. The dated and initialed check lists prepared by members of the Station Technical Staff indicate functional tests of the generator load rejection scram sensor were performed on September 29, October 28, and November 7 in accordance with operating license DPR-19. We have been unable to locate all the operator's surveillance sheets for tests between August 5 and December 4, 1970.

7. Methods and procedures used during the required in-service inspections were approved by non-destructive testing experts from Commonwealth Edison's Operating Analysis Department. Mr. E. C. Bailey of Commonwealth Edison was consulted both as to the findings and the action being taken throughout the examination program.

Several linear and dot type surface indications were found on various safe ends. Repairs were made by minimal grinding to remove the indications. The indication on Nozzle N-19A (core spray) also appeared to be merely a surface indication, but required extensive grinding before it was removed. The indications on the core spray nozzle safe end were so small and so few they would not have required removal to meet the applicable Code requirements. Their appearance did not indicate they were caused by corrosion. A repair procedure was written to conform to Section III and Section XI of the ASME Boiler and Pressure Vessel Codes, which detailed methods to be employed, tests to be performed and witnesses to approve of the repair program. At the time that the inspection and repairs were made, Edison General Office management decided this repair should be classified as required maintenance to be reported in the Station Semi-Annual Report. Because of the AEC's concern over furnace sensitized safe ends, Commonwealth Edison will inform Region III Compliance in accordance with Paragraph 6.6.A.3 whenever a repair requires removal of more than one-third of the wall thickness.

8. Procedures now in effect require that operation, maintenance, repair, refueling and plant modifications be reviewed, documented and adequately tested. We recognize the need for additional procedures to be completely responsive to Appendix "B". We are currently developing a Commonwealth Edison Company Quality Assurance Manual and the supporting procedures for each Station. This Manual is intended to meet the requirements of Appendix "B", 10 CFR Part 50. We expect the Manual to be completed by September 15, 1971 and the supporting procedures by November 1, 1971.

Because of our growing commitment to nuclear generation, we have been reevaluating our management organization. In January 1971, Mr. N. A. Kershaw was appointed Superintendent Nuclear and Fossil Systems, for our Production Department. One of his major responsibilities is the surveillance of our operations to assure compliance with licenses. In May 1971, Mr. E. J. Hemzy was named our Quality Assurance Administrator and reports directly to Mr. L. F. Lischer, our Engineering Vice President. He formerly reported to our Superintendent of Station Construction. On Friday, July 1, Mr. Ward, Chairman of Commonwealth Edison, and Mr. Ayers, President, met with Dr. Mann, Dr. Morris and Mr. Giambusso of the AEC to discuss our management organization. We are committed to meet with them again to discuss a review we have undertaken.

Very truly yours,

Byron Lee Jr

Byron Lee, Jr.
Assistant to the President

Approved: Thomas G. Ayers

Thomas G. Ayers
President