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

August 21, 1984

Mr. James G. Keppler
Regional Administrator
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

Subject: Byron Generating Station Units 1 and 2
SALP Comments
I&E Inspection Report Nos. 50-454/84-22
and 50-455/84-15

Reference (a): July 10, 1984 letter from J. G. Keppler
to Cordell Reed.

Dear Mr. Keppler.

This letter provides Commonwealth Edison's comments on the recent SALP evaluation regarding Byron Station which was enclosed with reference (a). All of these comments were made known to the NRC during our meeting on July 21, 1984. I will reiterate here our responses to only the SALP Board's most significant comments.

We are pleased to know that the NRC has noticed an overall improvement in our regulatory performance at Byron. The SALP Board has pointed out functional areas where additional improvements can be made. Appropriate increases in management attention will be given to all those areas. Improved regulatory performance in all areas will continue to be an important goal on the Byron project.

We concur with the SALP Board's recommendation that additional attention should be focused upon preparation for NRC RO and SRO license exams. Poor results on the first written examination followed a period of extremely heavy preoperational testing. It appears that the time allocated for exam preparation was inadequate. This was corrected in preparing for the October, 1983 exams. License candidates were not used for peroperational testing activities while they were in training and more time was devoted to review in preparation for the exam. More instructor hours were also provided. These actions seem to have produced the desired improvement in exam results. The percent passing that exam was close to the national average. We expect further improvement in this area.

We also agree that continued high priority and management attention is warranted to assure satisfactory completion of the preoperational test program. Actions taken early in the evaluation period were effective in improving the control and documentation of test activities. Recent improvements in the test review process provide additional assurance of the satisfactory completion of the testing program.

The SALP Board's concern regarding the implementation of the Byron fire protection program is understandable. Recent Region III fire protection inspections at other plants have provided new insight into the NRC's expectations regarding the implementation of the requirements for fire protection at nuclear power plants. The Region III inspection at Byron occurred before the programs there could be upgraded. Each of the specific NRC findings are now being addressed. During 1984 we have made a special effort to involve individuals with fire protection expertise in all aspects of the Byron fire protection program. We have also conducted an extensive review of our program and delineated our commitments in much greater detail. Attachment A to this letter summarizes the extent of these efforts. We believe we are adequately addressing the SALP Board's concern in this area.

Finally, we are pleased that the SALP Board made special notice of the efforts expended on the Byron QC Inspector reinspection program. We appreciate the NRC's cooperation in the inspection and prompt review of the results of this work.

Thank you for providing this opportunity to comment upon the SALP evaluations.

Very truly yours,

Bide Thomas

Bide Thomas
Executive Vice-President

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Attachment A

Involvement of Fire Protection

Experts in the Byron Project

Individuals with appropriate fire protection expertise are involved in all the various aspects of design, testing and operation at Byron Station as described below.

Design

The initial design of all fire protection features for Byron/Braidwood was reviewed by fire protection engineers from M&M Protection Consultants for conformance to Nuclear Mutual Ltd. (NML) Property Loss Prevention Standards. As a result of this review, recommendations were issued stating where compliance with certain standards was mandatory for the plant to be insurable and where non-compliance with certain standards would result in insurance penalties. All recommendations have been resolved to the satisfaction of NML and their consultants.

A fire protection engineer was utilized in conducting the fire hazards analysis for Byron and Braidwood. The individual involved was Mr. Thomas J. Kramer of Schirmer Engineering.

Mr. Kramer participated in conducting the fire hazards analysis and in preparation of the Fire Protection Report. He was involved in all phases of this activity during the initial preparation of this report in 1977. This included the identification of fire zone and fire area boundaries, the identification of fire zone combustible material inventories and the subsequent calculation of fire loading (Btu/ft^2) for each fire zone, the identification of the fire protection systems which are present, including detection systems and automatic and manual suppression systems, and the identification and analysis of a design basis fire in each fire zone.

A fire protection engineer was not utilized during preparation of the safe shutdown analysis (Section 2.4 of the Fire Protection Report) or for any of the three subsequent amendments to the Fire Protection Report. The 1982 revision was a general update of the report, meant to incorporate the numerous design changes which had taken place over the years, and to provide more complete design details where such details were not available in 1977. This revision also included the Safe Shutdown Analysis as a new Section 2.4 of the report. Amendments 1 and 2 incorporated changes resulting from the NRC review of the report. Since the basic conclusions presented in the initial report were not changed, the use of a fire protection engineer was not considered to be essential.

In 1983, CECo engineering procedures were established to require copies of drawings and/or calculations involving fire protection of the plant to be distributed to the CECo Fire Protection Engineer and M&M Protection Consultants for their review. Comments are transmitted to the Project Engineering Department and appropriately resolved.

Since January, 1984 fire protection engineers from M&M Protection Consultants have been actively involved in the updating of the Fire Protection Report and formulation of fire protection programs.

Initial Testing

Initial tests of water systems were performed by station personnel and witnessed by vendor representatives and M&M Protection Consultants. Concentration testing of carbon dioxide and Halon gas suppression systems were performed by vendor representatives. The results of these tests were also reviewed by M&M Protection Consultants.

Administrative Controls

The station Fire Marshall oversees the operation and maintenance of fire protection equipment and administrative controls. At Byron, this individual has completed the following specific training: "Firefighting for Nuclear Power Plant Personnel," Texas A&M University; "Operation Phase Fire Protection", General Physics Corporation; and "CECo Seminar", CECo Production Training Department. An operating engineer and an instrument maintenance foreman also attended the Texas A&M class.

Recently, a graduate Fire Protection Engineer was hired to provide onsite engineering expertise.

The initial fire pre-plans were developed with the assistance of fire protection engineers from Schirmer Engineering.

Corporate Support

The Technical Services Nuclear Department staff includes at least one fire protection engineer who meets the requirements for membership in the Society of Fire Protection Engineers. This engineer is involved in inspection and reporting activities concerning property insurance for the nuclear plants. He also ensures that the annual fire protection audits required by the Tech Specs are performed. He is available for reviews of designs, procedures, etc. He is also involved in day-to-day fire protection activities such as answering code related questions or solving problems at all stations. In addition he chairs meetings of the station fire marshals to exchange information and review matters of mutual interest.

He advises the Nuclear Station Division Management with respect to actions or policy for specific fire protection problems and generic issues. When fire protection incidents occur, he advises the fire marshals who may have the potential for a similar episode. He provides corporate overview in the fire protection area while visiting the stations. At those times he advises station and corporate management of potential problems with the station's program.

Quality Assurance

The corporate quality assurance department includes a fire protection engineer who advises individual auditors with regard to the scope, timing, quantity, and technical standards for audits of fire protection program implementation and participate in the audits of fire protection. During 1984 the level of activity in this area has been increased significantly.

Special Task Force

Because of the concerns expressed by the NRC on January 20, 1984, a fire protection task force was established to insure that all engineering, licensing and operating fire protection activities for Byron Station are coordinated and correctly implemented. A qualified fire protection engineer has worked with the task force. The task force has met periodically and is expected to continue operating through the Byron 1 fuel load or beyond if the need exits.

The initial tasks which were addressed by the task force were to assure that:

1. The Fire Protection Report is accurate, particularly with respect to associated circuits and control and instrumentation cables.

2. The testing program for fire protection systems is documented, reviewed, and acceptable in accordance with applicable commitments.

3. Fire Protection expertise used in the overall fire protection program is identified and documented.

4. All deviations from NRC fire protection guidance, including NFPA Codes where applicable, and commitments are identified and documented.

5. A listing of all procedures required to implement fire protection program commitments is prepared.

6. A schedule for the completion of all open items in the fire protection area is prepared.

7. Other fire protection issues arising from the NRC review of the fire protection area or for other reasons are addressed.

8. Review Byron/Braidwood against the specific criteria of Appendix R and BTP 9.5-1. Prepare a report documenting compliance with each item or prepare deviation requests for submittal to NRC.

9. Demonstrate and document that a service water system exists which is an adequate backup to the fire water system.

These tasks have been completed and the results of this work are documented in Amendments 3 and 4 to the Fire Protection Report.