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Byron Generating Station  
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September 20, 1995

**ComEd**

LTR: BYRON-95-5102  
FILE: 1.10.0101

Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555

Attention: Document Control Desk

SUBJECT: Byron Station Units 1 and 2  
Byron Station Response: "Request for Additional Information Regarding  
Generic Letter 92-08, "Thermo-Lag Fire Barriers" Pursuant to  
10CFR50.54(f)"

REFERENCES: 1) Byron Letter (BYRON 95-5033) dated March 29, 1995, "Byron  
Station Response to Request for Additional Information Regarding  
Generic Letter 92-08, Thermo-Lag Fire Barriers Pursuant to 10CFR  
50.54f."  
2) ComEd Letter to NRC dated December 1994 providing  
Commonwealth Edison's response to NRC's Request for Additional  
Information concerning GL 92-08.

The purpose of this letter is to provide the NRC with an update on the status of resolving the Thermo-Lag (Generic Letter 92-08) issues at Byron Station. In Reference 2, Byron Station indicated that most of the existing Thermo-Lag would be replaced with a qualified fire barrier. In Reference 1, Byron Station informed the NRC that Byron and Braidwood were reevaluating the corrective actions previously specified for cable trays and conduits protected with Thermo-Lag. The reevaluation described in Reference 1 is now complete. A new plan of corrective action has been developed to replace the corrective actions described in Reference 2. The plan of corrective action is described below. The original Byron commitment to complete the resolution of the GL 92-08 issues by the end of 1996 remains in effect. The plan of corrective action being implemented at Byron Station uses three methods of resolution:

- 1) Re-analysis of Safe Shutdown Analyses to eliminate the need for the fire barrier,
- 2) Re-routing of cables such that redundant safe shutdown trains are not located in the same fire zone, or
- 3) Replacement of the Thermo-Lag with a qualified fire barrier.

The resolution methods are being applied as follows. The original population of cables protected with Thermo-Lag numbered 64 for Unit 1 and 54 for Unit 2. For the 64 cables installed on Unit 1: 10 cables will be re-routed, 10 cables will be protected with DARMATT KM-1 fire barrier, and the remaining 44 cables have been determined not to be required to assure Safe Shutdown. For the 54 cables installed on Unit 2: 15

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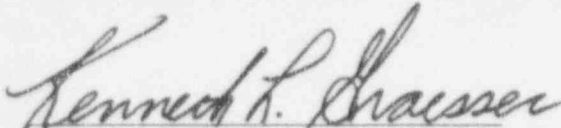
cables will be re-routed and the remaining 39 cables have been determined not to be required to assure Safe Shutdown and will remain as installed.

The cables being re-routed will be located so that their corresponding redundant counterpart and its associated support equipment cables are not located in the same zone as the re-routed cable. Therefore, one of the redundant components and all its required support equipment will be available for a fire occurring in any fire zone. In some cases, walls and floors separating fire zones containing redundant components do not carry a fire rating of 3 hours (although they are of 3 hour construction). Deviations from Appendix R will be prepared to justify the use of non-fire rated floors and walls consistent with deviations previously approved by the NRC for Byron Station. These deviations will be evaluated in accordance with 10CFR50.59 and submitted in a future Fire Protection Report Amendment. The design of cable re-routes is in progress and will be complete for both units by January 1996. The installation of the new cables began in September 1995 for Unit 1 and will begin in May 1996 for Unit 2. All cable re-route installations are expected to be completed prior to December 1996.

The 10 cables currently protected with Thermo-Lag and designated to be protected with DARMATT KM-1 are all located on Unit 1. Seven of the ten cables have already been protected with a 1-hour rated DARMATT KM-1 fire barrier. The remaining 3 cables will be protected with DARMATT KM-1 in the second quarter of 1996.

The 83 cables that have been determined not to be required to assure Safe Shutdown will remain as they currently are routed with the Thermo-Lag abandoned in place. In some cases, circuit changes to selected equipment are required to support the conclusion that Safe Shutdown can be achieved. The necessary circuit changes will be installed during refueling outages scheduled in 1996. Approved Byron Calculations document that each of these cables is not required to assure Safe Shutdown. Revisions to the Fire Protection Report Safe Shutdown Analyses based on these calculations will be prepared and submitted to the NRC in a Fire Protection Report Amendment scheduled for December 1996.

As discussed above, all actions necessary to resolve the Thermo-Lag (GL 92-08) issues at Byron are expected to be completed by the end of 1996. Following the completion of Unit 1 work activities (June 1996), a progress update and any changes in resolution plans or schedule will be provided.



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Byron Nuclear Station

KLG/cb

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Site Engineering File