

Commonwealth Edison Company  
Byron Generating Station  
4450 North German Church Road  
Byron, IL 61010-9794  
Tel 315-234-5441



March 15, 1996

LTR: BYRON 96-0071  
FILE: 1.10.0101

U.S. Nuclear Regulatory Commission  
Washington, DC 20555

ATTENTION: Document Control Desk

SUBJECT: Byron Nuclear Power Station Units 1 and 2  
Supplemental Response to Notice of Violation  
Inspection Report No. 50-454/94020; 50-455/94020  
NRC Docket Numbers 50-454, 50-455

REFERENCE: Lewis F. Miller Jr. Letter to Mr. Graesser dated  
September 29, 1994, transmitting NRC Inspection Report  
50-454/94020; 50-455/94020

K. Graesser Letter to U.S.NRC dated October 31, 1994 transmitting  
Response to Notice of Violation (454(455)/94020-01)

Enclosed is Commonwealth Edison Company's Supplemental response to the  
Notice of Violation (NOV) which was transmitted with the referenced letter and  
Inspection Report. The NOV cited a Severity Level V violation requiring a  
written response. ComEd's supplemental response is provided in the  
attachment.

This letter contains the following commitments:

- 1) The Procedure Users Group will address the reduction of the  
procedural burden at Byron.
- 2) The 1995 Byron Excellence Review Team (BERT) assessment will be  
reviewed to provide insight into the decreasing trend of  
maintenance related procedural adherence events from 1994.

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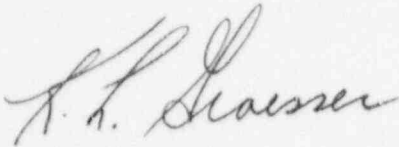
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If your staff has any questions or comments concerning this letter, please refer them to Don Brindle, Regulatory Assurance Supervisor, at (815)234-5441 ext. 2280.



K. L. Graesser  
Site Vice President  
Byron Nuclear Power Station

Attachment

KLG/DB/rp

cc: H. J. Miller, NRC Regional Administrator - RIII  
G. F. Dick Jr., Byron Project Manager - NRR  
H. Peterson, Senior Resident Inspector, Byron  
L. F. Miller Jr., Reactor Projects Chief - RIII  
D. L. Farrar, Nuclear Regulatory Services Manager, Downers Grove  
DCD-Licensing, Downers Grove

ATTACHMENT  
SUPPLEMENTAL RESPONSE TO NOTICE OF VIOLATION  
INSPECTION REPORT 454/94020; 455/94020

VIOLATION (454(455)/94020-01)

During an NRC inspection conducted from July 22, 1994 to September 5, 1994, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1994) the violation is listed below:

Byron Technical Specification 6.8.1 states, in part, that written procedures shall be established, implemented, and maintained covering the activities associated with Fire Protection Program implementation.

Byron Administrative Procedures, BAP 1100-3, "Fire Protection Systems, Fire Rated Assemblies, Radiation, Ventilation, and Flood Seal Impairments," describes the steps necessary before impairing a Fire Protection Equipment/Component, for example fire doors, and to insure compensatory measures are taken during these impairments. Fire Protection Impairment Permit BAP 1100-T17 is required for all fire protection and sealing devices, which are impaired. This permit shall not be terminated until the equipment is restored to operable status. It also describes, that fire doors, dampers, etc., separating safety related systems or systems important to safe shutdown are required to be operable as defined by Administrative Technical Requirements.

Contrary to the above, on August 18, 1994, the inspector noted two fire doors D418 and D463 (non-essential switchgear room) missing the door sill and without impairment tags attached. Fire door D302 (radwaste control room entrance) was noted to be blocked open with a large fan, and the fire door for the radiological waste chiller room was blocked open with a trash can, with neither door having an impairment tag attached.

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

REASON FOR THE VIOLATION:

An audit was being performed on the Fire Protection Impairment Program (FPIP) in which all FPIP cards were being walked down to ensure they were still required. When the individual performing the audit reviewed the FPIP for doors D418 and D463, it stated the doors were impaired by being propped open to allow drain hoses to pass through. Since the doors were no longer being propped open the individual assumed the impairment was no longer required, when in fact it was in place due to the sills that had been removed so the doors would not have to be propped open.

The doors to the radwaste control room and radwaste chiller room were open to allow ventilation to cool the equipment in the radwaste control room. These fire doors, which were found blocked open without FPIP cards were done so under the assumption that a fire door is not impaired as long as it is closed and latched or capable of being closed and latched in the event of a fire. This is a Byron Station interpretation. There were no FPIP cards hung on the doors because the radwaste control room is manned 24 hours a day, and thus the operator would be capable of closing the doors in the event of a fire.

It was determined that these events were rule based (RB) errors in which personnel were performing the tasks, or not performing the tasks, as a result of past experience without fully understanding the current situation or expectation. Rule Based type events dealing with procedures could be reduced through procedural restructuring, coaching and reinforcing expectations, or even procedural elimination.

#### CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED:

- 1) The doors that were in question were immediately brought to the attention of the Fire Marshall and the proper impairment tagging was issued. The ventilation system for the radwaste control room was repaired and the doors closed.
- 2) A priority list of the fire doors that require maintenance has been assembled. These doors are being repaired, and as doors become impaired they are being added to the list. A housekeeping maintenance repair crew was formed to ensure minor door repairs are completed in a timely manner and major repairs are dealt with through the normal process.
- 3) A trend investigation was initiated to look into "BAP Adherence" events at Byron Station. During the investigation, reviewed were not only Byron Administrative Procedure (BAP) events but Technical Procedures events as well. The review concentrated on 1994 and 1995 data. During 1994 there were twenty-four (24) events flagged as tied to procedural adherence. In 1995 there were forty (40) events flagged.

The 1994 events flagged as procedural adherence represent approximately 2.5% of the total number of events (Problem Identification Reports (PIRs)) for 1994, while the 1995 events flagged as procedural adherence represent approximately 2.9% of the 1995 PIRs. The data excluded issues closed and instrument out of tolerances.

The 1994 and 1995 procedural adherence PIRs were further subdivided into administrative and technical procedural adherence. In 1994, events flagged as administrative procedural adherence represented less than one percent of the total PIRs while technical procedural adherence represented just over one percent. The 1995 events showed both administrative and technical procedural adherence represented slightly over one percent.

The procedural adherence PIRs were also subdivided by departments. The 1994 data showed three major departments involved with the events: Maintenance, Operations, and Engineering. The 1995 data showed the same three major departments. This is not unexpected since these three departments are in the field performing work most often.

The procedural adherence PIRs were also subdivided by causal factor. The 1994 data showed two major causal factors: work practices, and written communications. The 1995 data showed the same two causal factors. However, the analyses performed concluded that there is no one cause to attack, that would positively address the prevention of procedural adherence events.

CORRECTIVE STEPS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATION:

Although our trend investigation of BAP's described above did not find any single cause to attack, Byron Station, in order to continue to make improvements in procedural adherence, will do the following:

Procedural adherence research indicates that as a work force matures, procedures must evolve or the procedures become a burden to the worker. The Procedure Users Group is addressing the reduction of the procedural burden at Byron. This action will be tracked by NTS #454-230-95-0010-01.

The NTS data shows a drop in the percentage of maintenance related procedural adherence events from 1994 to 1995. A review and comparison of NTS data and the 1995 BERT report, with regard to maintenance adherence, is being made to determine why the change from 1994 to 1995 occurred. This action will be tracked by NTS # 454-230-95-0010-02.

The development of Byron Site Policy Memo 200.14 which puts forth station expectations for technical procedure use and adherence, and the revision of Station procedure BAP 1310-2T1 which states responsibilities for identification and documentation of procedural deficiencies, reduced the procedure burden to some extent (changing a procedure became easier). This action is complete.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

Full compliance was achieved on August 18, 1994 when the doors in question were tagged with FPIP cards.