May 9, 1997

Mr. K. Graesser
Site Vice President
Byron Nuclear Power Station
Commonwealth Edison Company
4450 North German Church Road
Byron, IL 61010

SUBJECT: NOTICE OF VIOLATION (NRC INSPECTION REPORT 50-454/96013(DRS); 50-455/96013(DRS))

Dear Mr. Graesser:

This will acknowledge receipt of your May 1, 1997 letter in response to our March 31, 1997 letter transmitting a Notice of Violation (NOV) associated with the above mentioned inspection report. This report summarized the results of the fire protection corrective action inspection at your Byron Plant. We have reviewed your corrective actions for the NOV and have no further questions at this time. These corrective actions will be examined during future inspections.

In regard to your response to the unresolved issue concerning the reactor coolant pump motor oil leakage collection system, we will review your response and contact you if further information is required.

Sincerely,

/s/ M. Leach (for)

Geoffrey E. Grant, Director
Division of Reactor Safety

Docket No. 50-454
Docket No. 50-455

Enclosure: Ltr 05/01/97, K. Graesser, ComEd, to US NRC w/encl

See Attached Distribution

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ComEd

May 1, 1997

LTR: BYRON 97-0105
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U.S. Nuclear Regulatory Commission
Washington, DC 20555

Attention: Document Control Desk

Subject: Byron Nuclear Power Station Units 1 and 2
Response to Notice of Violation
Inspection Report No. 50-454/96013; 50-455/96013
NRC Docket Numbers 50-454, 50-455

Reference: Geoffrey E. Grant letter to Mr. Graesser dated March 31 1997, transmitting NRC Inspection Report 50-454/96013; 50-455/96013

Enclosed is Commonwealth Edison Company's response to the Notice of Violation (NOV) and Unresolved Item (URI) which was transmitted with the referenced letter and Inspection Report. The NOV cited one (1) Severity Level IV violation requiring a written response. ComEd's response is provided in the attachment.

We share your concern with repeat events occurring from ineffective corrective actions. Byron Station has undertaken additional measures to assure that as deficiencies are identified, they are effectively corrected. Examples of these actions includes:

- Assignment of a senior management sponsor to all root cause investigations to remove barriers or challenges during the root cause investigations.
- Establishment of Plant Operating Review Committee (PORC) by July 1, 1997 to review appropriate root cause investigations and related corrective actions.
- Additional staffing is being provided to the Root Cause Investigation Group to improve the quality of root cause investigations.

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We also are concerned with the practice of allowing fire protection valves to remain in the as-left surveillance position for extended periods pending resumption of suspended surveillances. Operating will revise the appropriate procedures to preclude this practice.

In addition to the commitments stated above, this letter contains the following commitments relative to the Notice of Violation:

1. An Engineering Review will be conducted to ensure appropriate protective measures are installed to prevent future freezing of the instrument rack (0PL52J) in the Circulating Water Pump House (CWPH).

2. 0BOS XFT-A1, "Freezing Temperature Equipment Protection", is being revised to include verification that the CWPH outside doors are adequately posted, warning that the doors are not to be propped open.

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.

Respectfully,

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

KLG/DB/rp

Attachment(s)

cc: A. B. Beach, NRC Regional Administrator - RIII
G. F. Dick Jr., Byron Project Manager - NRR
S. D. Burgess, Senior Resident Inspector, Byron
R. D. Lanksbury, Reactor Projects Chief - RIII
F. Niziolek, Division of Engineering - IDNS
D. L. Farrar, Nuclear Regulatory Services Manager, Downers Grove
Safety Review Dept, c/o Document Control Desk, 3rd Floor, Downers Grove
DCD-Licensing, Suite 400, Downers Grove.

ATTACHMENT I

VIOLATION (454/455-96013-02)

Criterion XVI, "Corrective Action," of 10 CFR Part 50, Appendix B, states, in part, that measures shall be established to assure that conditions adverse to quality are promptly identified and corrected. In the case of significant conditions adverse to quality, the measure shall assure that the cause of the condition is determined and corrective action taken to preclude repetition.

Contrary to the above, as of March 10, 1997, the licensee failed to establish effective corrective action to prevent recurring freezing of plant fire protection equipment during the previous and current winter seasons.

This is a Severity Level IV violation (Supplement I) (50-454/455/96013-02(DRS)).

REASON FOR THE VIOLATION

The Fire Protection lines noted were frozen for a variety of reasons: 1)outside air dampers failed open; 2)cold temperatures in a warehouse; and 3)Various Circulating Water Pump House (CWPH) doors open for extended period of time.

On one occasion, the equipment doors were difficult to get closed after having been open to transfer equipment. Before the doors could be closed, the sensing lines to the 0A Fire Pump froze. This was unavoidable due to the cold temperatures and location of the local panel 0PL52J in relation to the doors.

On a second occasion, an individual's negligence to the sensitive nature of the plant equipment to adverse temperatures, the door to the CWPH was propped open resulting in freezing sensing lines to the 0A Fire Pump. The individual failed to practice attention to detail and think about how his action would affect the surrounding plant equipment.

The entrance doors to the CWPH are not classified as fire or security doors and they had no special labeling or warning signs posted to instruct personnel to special conditions.

CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

1. The 0A Fire Pump sensing lines on local panel 0PL52J were thawed.

2. The CWPH doors were closed and work crew personnel were instructed not to block open the door.

3. A standdown was conducted at the start of the following two (2) shifts (days and afternoons) to assure personnel awareness of the incident.

4. Signs were ordered and placed at each entrance which state doors must remain closed at all times and cannot be propped open.

CORRECTIVE STEPS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATION

1. An Engineering Review will be conducted to ensure appropriate protective measures are installed to prevent future freezing of the instrument rack (0PL52J) in the Circulating Water Pump House (CWPH). This will be tracked by NTS #454-100-96-01302-01.

2. 0BOS XFT-A1, "Freezing Temperature Equipment Protection", is being revised to include verification that the CWPH outside doors are adequately posted, warning that the doors are not to be propped open. This will be tracked by NTS #454-230-97-CAQS00009-02.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

Full compliance was achieved on 1/20/97 when repairs to the frozen instrument rack in the CWPH were completed.

ATTACHMENT II

UNRESOLVED ITEM (454/455-96013-01)

PIF 454-200-96-0032, dated June 24, 1996, identified that all potential oil leaks on the reactor coolant pumps did not have drip pans to collect and route the oil to a safe collection point as required by 10 CFR 50, Appendix R.

The inspectors reviewed Byron Operability Assessment 96-025, dated June 25, 1996, and Byron RCP Oil Collection System Fire Protection Evaluation, dated June 24, 1996. The licensee's evaluation states, "Contrary to Byron's Fire Protection, Sections 3.7.G and A5.7.III.O, all potential oil leakage points are not provided with pans to collect drips and seepage. Specifically, there are two bolted flanges and two drain plugs associated with the oil cooler on each RCP that were not initially provided with drip pans." The licensee's evaluation also states, "Appendix R to Part 50 of Title 10 of the Code of Federal Regulations requires the installation of an oil collection system to collect oil from all potential pressurized and unpressurized leakage sites." However, the licensee determined it was acceptable to operate with this condition.

10 CFR 50, Appendix R, Section III, O, requires that RCP lube oil collecting systems shall be capable of collecting lube oil from all potential pressurized and unpressurized leakage sites in the RCP lube oil systems.

NUREG-0876, Safety Evaluation Report, Supplement No. 5, pages 9-17, closed an NRC unresolved issue identified in the Safety Evaluation Report regarding the provision of an oil collection system for the RCPs. This was based on the licensee's commitments in the fire protection report and letter dated August 20, 1984, to install an oil collection system capable of collecting oil from all potential pressurized and unpressurized leakage sites.

The Byron Fire Protection Report, pages 3.7-3 and A5.7-35, 36, stated that the RCP lube oil leakage collection system complied with NRC and Appendix R requirements. PIF 454-200-96-0032 identified that the licensee was not in full compliance.

As corrective action to PIF 454-200-96-0032, the licensee installed additional drip pans under the bolted flanges and drain plugs and lengthened one drain pan. Work had been completed on both units.

The licensee identified this issue and took appropriate corrective action. An Operability Assessment was completed on July 25, 1996, that documented continued operability of both units. However, the licensee was not in compliance with 10 CFR 50, Appendix R, Section O requirements since plant construction. In addition, the licensee failed to notify the NRC, pursuant to 10 CFR 50.73, that this condition was outside the Byron design basis. The licensee stated that the RCP oil collection system was not outside the Byron design basis and therefore was not reportable. This issue is unresolved (50-454/455/96013-01(DRS)) pending review of the licensee's requested response to this issue.

RESPONSE

10 CFR 50 Appendix R Subsection O (requirements for Reactor Coolant Pump (RCP) oil collection systems) requires that all leakage from pressurized and unpressurized parts of the oil collection system be collected. Per our previous teleconferences regarding this issue, we feel that we are not outside our design basis for this system configuration. The reasons for this are as follows:

A response to question 600.1 of the Byron/Braidwood FSAR Amendment 47, dated April 1986 identified a discussion of conformance to 10CFR50 Appendix R and deviations from the requirements are described in Appendix A5.7 and A5.8 to the Byron/Braidwood FPR. Specifically, the deviation we submitted specified five (5) drip pans on each RCP motor as described in the Fire Protection Report (FPR) on pages A5.7-35 and A5.7-36. The RCP motor oil drip pan installation as identified was consistent with the original design.

NUREG-0876, Safety Evaluation Report, Supplement No. 5, pages 9-17, closed an NRC unresolved issue identified in the Safety Evaluation Report regarding the provision of an oil collection system for the RCPs. This was based on the licensee's commitments in the fire protection report and letter dated August 20, 1984, to install an oil collection system capable of collecting oil from all potential pressurized and unpressurized leakage sites. This document also states that "The system is designed and installed such that any failure will not lead to a fire during normal or design basis accident conditions, including safe shutdown earthquake. This commitment satisfies the guidelines contained in Section C.7.a of BTP CMEB 9.5-1 and is, therefore, acceptable."

This "acceptable condition" was further substantiated by NRC Inspection Report 83-62 in which the RCP Oil Collection system was reviewed and identified only a concern (Unresolved Item (URI) 50-454/83-62-37)with the oil holding tank collection capacity. This URI was subsequently closed, in NRC Inspection Report 84-74, with no other concerns on the system.

The previous RCP oil collection configuration satisfies the intent of the system by preventing the anticipated leaks in both the high and low pressure portions of the RCP lube oil systems from coming in direct contact with potential ignition sources. In addition, the fire protection features provided in the containment structures are adequate to minimize potential fires, and the ability to achieve and maintain safe shutdown is not adversely affected by the previous configuration.

We were not outside our original design conditions. The new and revised drip pans were installed as an enhancement to our original design in the conservative direction.