NOTICE OF VIOLATION

Commonwealth Edison Company
Byron Station, Units 1 and 2

Docket Nos. 50-454; 50-455
License Nos. NPF-37; NPF-66

During an NRC inspection conducted April 7-15, 1997, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG 1600, the violation is listed below:

10 CFR 50.65(a)(1) requires, in part, the holders of an operating license shall monitor the performance or condition of structures, systems or components (SSCs), against licensee-established goals, in a manner sufficient to provide reasonable assurance that such SSCs, within the scope of the rule, are capable of fulfilling their intended functions. When the performance or condition of an SSC does not meet established goals, appropriate corrective action shall be taken.

10 CFR 50.65(a)(2) requires, in part, that monitoring as specified in 10 CFR 50.65 paragraph (a)(1) is not required where it has been demonstrated that the performance or condition of an SSC is being effectively controlled through the performance of appropriate preventive maintenance, such that the SSC remains capable of performing its intended function.

Contrary to 10 CFR 50.65(a)(2), as of April 15, 1997, the time that the licensee elected to not monitor the performance or condition of certain SSCs against licensee-established goals pursuant to the requirements of Section (a)(1), the licensee had not demonstrated that the performance or condition of SSCs within the scope of 10 CFR 50.65 were being effectively controlled through the performance of appropriate preventive maintenance, as evidenced by the following examples:

A. The licensee had not demonstrated that the performance of the auxiliary feedwater function (AF1), and the essential safety features and reactor protection actuation function (EF1) was being effectively controlled through the performance of appropriate preventive maintenance under the requirements of 10 CFR 50.65(a)(2). Specifically, the licensee failed to establish an adequate measure to evaluate the effectiveness of the performance of appropriate preventive maintenance on the auxiliary feedwater function, and the essential safety features and reactor protection actuation function prior to placing these SSCs under Section (a)(2). The licensee's basis for demonstrating effective preventive maintenance for these functions was the criterion that they experience less than two failures within 2 years. The appropriateness of the preventive maintenance evaluation was not adequate because the preventive maintenance criteria exceeded the values assumed in the licensee's probabilistic risk assessment without technical justification. As a result the systems would not have been controlled such that they remained capable of performing their intended functions. Therefore, the licensee's basis for placing the auxiliary feedwater function, and the essential safety features and reactor protection actuation function under the requirements of Section (a)(2) was inadequate and these functions should have been monitored in accordance with Section (a)(1).

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B. The licensee had not demonstrated that the performance of the emergency lighting system (LL1) was being effectively controlled through the performance of appropriate preventive maintenance under the requirements of 10 CFR 50.65(a)(2). Specifically, the licensee failed to establish adequate measures to evaluate the effectiveness of the preventive maintenance on the emergency lighting system prior to placing this SSC under the requirements of Section (a)(2). The licensee's sole basis for demonstrating effective preventive maintenance for the emergency lighting system was the criterion that each emergency lighting unit experience less than three failures within a 2-year period. This criterion would allow an excessive failure rate for each emergency lighting unit without being evaluated for (a)(1). The number of demands for this standby system were assumed to be eight demands during a 2-year period, which would allow a 37 percent failure rate for each emergency lighting unit. In addition, previous emergency lighting surveillance results had not been reviewed to identify and evaluate past functional failures for emergency lighting units. Multiple failures of emergency lighting units would not demonstrate effective preventive maintenance because the performance of the emergency lighting system would not have been controlled such that it remained capable of performing its intended functions. Therefore, the licensee's basis for placing the emergency lighting system under the requirements of Section (a)(2) was inadequate and the emergency lighting system should have been monitored in accordance with Section (a)(1).

C. The licensee had not demonstrated that the performance of the fuel handling equipment (FH1) was being effectively controlled through the performance of appropriate preventive maintenance under the requirements of 10 CFR 50.65(a)(2). Specifically, the licensee failed to establish adequate measures to evaluate the effectiveness of the preventive maintenance on the fuel handling equipment prior to placing this SSC under the requirements of Section (a)(2). The licensee's sole basis for demonstrating effective preventive maintenance for the fuel handling system was the criterion that the fuel handling system experience less than four equipment failures within a 2-year period. This criterion would allow functional failure events to occur that could result in up to four events resulting in damage to fuel assemblies during handling, events that could impair safe fuel movement or impair the ability of the spent fuel pool racks to maintain Keff less than 0.95 in the pool without compensatory actions. Multiple safety significant failures of these types would not demonstrate effective preventive maintenance because the performance of the fuel handling system would not have been controlled such that it remained capable of performing its intended functions. Therefore, the licensee's basis for placing the fuel handling system under the requirements of Section (a)(2) was inadequate and the fuel handling system should have been monitored in accordance with Section (a)(1).

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

Pursuant to the provisions of 10 CFR 2.201, Commonwealth Edison is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission,

ATTN: Document Control Desk, Washington, D.C. 20555, with a copy to the Regional Administrator, Region III, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice of Violation 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an Order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time. Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

Dated at Lisle, Illinois
this 12th day of June 1997