

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Commonwealth Edison Company
Byron Station

Docket Nos. 50-454; 50-455
License Nos. NPF-37; NPF-66
EA 96-508

During an NRC inspection conducted on September 27 through December 17, 1996, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the NRC proposes to impose civil penalties pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violations and associated civil penalties are set forth below:

I. Violations Assessed a Civil Penalty

- A. 1. 10 CFR Part 50, Appendix B, Criterion III, "Design Control," states, in part, that measures shall be established to assure that the design basis for those structures, systems, and components to which Appendix B applies, are correctly translated into specifications, drawings, procedures, and instructions. It further states that the design control measures shall provide for verifying or checking the adequacy of design, such as the performance of design reviews, by the use of alternate or simplified calculational methods.

Contrary to the above, as of October 15, 1996, design control measures were inadequate, in that ultimate heat sink cooling tower basin makeup calculation, NED-M-MSD-14, Revision 0, dated February 1992, and Revision 1, dated August 1992, did not correctly establish the volume of water needed in the ultimate heat sink to support Technical Specification 3.7.5 when relying on the deep well pumps for makeup capability. The calculation did not account for a reduced usable essential service water cooling tower basin water volume due to silt accumulation or due to the design of the anti-vortex drainage duct surrounding the essential service water pump suction pipe. (01013)

2. 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requires, in part, that activities affecting quality be prescribed by documented procedures of a type appropriate to the circumstances and shall be accomplished in accordance with these procedures. The procedures shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished.

Contrary to the above, as of October 15, 1996, the licensee failed to ensure that appropriate acceptance criteria were included in its procedures for determining that an important activity was

satisfactorily accomplished. Specifically, procedure OBVS SX-5, "Inspection of River Screen House and Essential Service Water Cooling Tower," Revision 2, dated November 25, 1991, failed to have appropriate quantitative acceptance criteria for allowable silt levels in the essential service water cooling tower basin to determine the operability of the essential service water system when inspections of the basin were performed. (01023)

This is a Severity Level III problem (Supplement I). Civil Penalty - \$ 50,000.

- B. 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," requires, in part, that measures shall be established to assure that conditions adverse to quality, such as deficiencies, deviations, and nonconformances are promptly identified and corrected. In the case of significant conditions adverse to quality, the measures shall assure that the cause of the condition is determined and corrective action taken to preclude repetition.
1. Contrary to the above, prompt corrective action was not taken on July 26, 1993, when a significant condition adverse to quality was identified when a diver recorded more than 14 areas where silt levels exceeded surveillance procedure OBVS SX-5 acceptance criteria in the essential service water cooling water basin, the river screen house pump sumps, and the river screen house intake and forebay area. The silt buildup in the essential service water cooling tower basin changed the volume of water as analyzed in the final safety analysis report and therefore could change the consequences of the design-basis accident bounded in the updated safety analysis report. The cause of the silting condition was not determined and corrective actions inappropriately consisted of the diver "distributing" the silt to levels that met the surveillance acceptance criteria. (02013)
 2. Contrary to the above, prompt corrective action has not been taken since July 26, 1993, to repair significant conditions adverse to quality for several portions of the essential service water cooling tower trash rack grating that had fallen away from upper lateral supports, or were lying in the bottom of the essential service water cooling tower basins, or were leaning against the basin support columns. The safety function of the trash rack grating is to ensure that large objects do not enter the suction lines for the essential service water pumps. (02023)

This is a Severity Level III problem (Supplement I). Civil Penalty - \$50,000.

II. Violations Not Assessed a Civil Penalty

- A. 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," requires, in part, that test procedures provide provisions for assuring that adequate test instrumentation is available and used.

Contrary to the above, on October 15, 1996, inadequate test instrumentation (i.e., a diver's boot and arm) was used to measure the silt levels in the essential service water cooling tower basins during the performance of procedure OBVS SX-5, "Inspection of River Screen House and Essential Service Water Cooling Tower," Revision 2, dated November 25, 1991. (03014)

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

- B. 10 CFR 50.71(e) requires, in part, that the final safety analysis report (FSAR) be updated periodically to assure that the information in the FSAR contained the latest material developed. The updated FSAR shall be revised to include the effects of: all changes made in the facility or procedures as described in the FSAR; all safety evaluations performed by the licensee either in support of requested license amendments or in support of conclusions that changes did not involve an unreviewed safety question. Revisions must be submitted within 24 months of either July 22, 1980, or the date of issuance of the operating license, whichever is later, and shall bring the FSAR up to date.

Contrary to the above, the licensee's first updated FSAR submittal dated December 12, 1988, and subsequent periodic FSAR submittals failed to include the latest material developed. Specifically, based on the licensee's safety evaluation in 1981, the service water cooling tower basins (as reflected in FSAR Figures 9.2-25, 9.2-26, and 9.2-27) were changed to include the anti-vortex drainage duct. The necessary changes to the FSAR figures were not included in the licensee's required updated FSAR submittal. (04014)

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

Pursuant to the provisions of 10 CFR 2.201, Commonwealth Edison Company (licensee) for the Byron Station is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, within 30 days of the date of this Notice of Violation and Proposed Imposition of Civil Penalty. This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the violation if admitted, and if denied, the reasons why, (3) the corrective steps that have been taken and the results achieved, (4) the corrective steps that will be taken to avoid further violations, and (5) the date when full compliance will be achieved. 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. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

The Licensee may pay the civil penalties by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, money order, or electronic transfer payable to the Treasurer of the United States in the amount of the civil penalty proposed above, or the cumulative amount of the civil penalties if more than one civil penalty is proposed, or may protest imposition of the civil penalty, in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission. Should the Licensee fail to answer within the time specified, an order imposing the civil penalties will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalties, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violation(s) listed in this Notice, in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why the penalties should not be imposed. In addition to protesting the civil penalties, in whole or in part, such answer may request remission or mitigation of the penalties.

In requesting mitigation of the proposed penalties, the factors addressed in Section VI.B.2 of the Enforcement Policy should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the Licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalties.

Upon failure to pay any civil penalties due which subsequently has been determined in accordance with the applicable provisions of 10 CFR 2.205, this matter may be referred to the Attorney General, and the penalties, unless compromised, remitted, or mitigated, may be collected by civil action pursuant to Section 234^e of the Act, 42 U.S.C. 2282c.

The response noted above (Reply to Notice of Violation, letter with payment of civil penalties, and Answer to a Notice of Violation) should be addressed to: Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region III, if applicable, and a hard copy to the NRC Resident Inspector at Byron Generating Station.

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. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected

and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

Dated at Lisle, Illinois
this 27th day of February 1997