NOTICE OF VIOLATION

Commonwealth Edison Company
Dresden Units 2 and 3

Docket Nos. 50-237 and 50-249
License Nos. DPR-19 and DPR-25
EA 93-182

During an NRC inspection conducted from November 30, 1992 through December 4, 1992 and during an NRC investigation, violations of NRC requirements were identified. In accordance with the "Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C, the violations are listed below:

A. Dresden Technical Specification 6.2.A.1 states that the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978, shall be established, implemented, and maintained. Regulatory Guide 1.33, Appendix A includes administrative procedures, general plant operating procedures, and procedures for startup, operation, and shutdown of safety related systems.

Dresden Operating Abnormal Procedure (DOA) 300-12, "Mispositioned Control Rod," Revision 2, Section D.2.a.(1), "subsequent operator actions," states that if a single control rod was inserted greater than one even notch from its in-sequence position, then the mispositioned control rod must be continuously inserted to position 00 if reactor power is greater than or equal to 20% rated core thermal power and if the control rod mispositioning occurred within the past 10 minutes.

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

Contrary to the above, on April 10, 1992, a mispositioned control rod that had been inserted greater than one even notch from its in-sequence position when reactor power was greater than 20% rated core thermal power and the control rod mispositioning occurred within the previous 10 minutes, was not inserted to position 00 as required. This event was a significant condition adverse to quality because a mispositioned rod could cause degradation of fuel cladding. Furthermore, the licensee failed to identify, correct, and determine the cause of this event, or preclude repetition of this significant condition adverse to quality, resulting in the occurrence of a similar event on September 18, 1992, described in item B below. (01013)

B. Dresden Technical Specification 6.2.A.1 states that the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978, shall be established, implemented, and maintained. Regulatory Guide 1.33, Appendix A includes administrative procedures, general plant operating procedures, and procedures for startup, operation, and shutdown of safety related systems.

1. Dresden Operating Procedure, (DOP) 0400-02, "Rod Worth Minimizer,"

Revision 6, Section F.6, and Dresden General Procedure, (DGP) 03-04, "Control Rod Movements," Revision 17, Section D.3, require an independent verifier if the rod worth minimizer is not available during control rod movement.

Contrary to the above, on September 18, 1992, the Unit 2 nuclear station operator (NSO) inserted control rod H-1 without an independent verifier and the rod worth minimizer was not available. (01023)

2. Dresden Operating Abnormal Procedure (DOA) 300-12, "Mispositioned Control Rod," Revision 2, Section C.2, "immediate operator actions," states, in part, that if a control rod was found or moved greater than one even notch from its in-sequence position, then all control rod movement must be discontinued.

DOA 300-12, Revision 2, Section D.2.a.(1), "subsequent operator actions," states that if a single control rod was inserted greater than one even notch from its in-sequence position, then the mispositioned control rod must be continuously inserted to position 00 if reactor power is greater than or equal to 20% rated core thermal power and if the control rod mispositioning occurred within the past 10 minutes. Section D.4 states, "In conjunction with step D.5, contact the Unit Operating Engineer or the Operations Duty Supervisor." Section D.5 states, "Compare the current Off Gas radiation level to the Off Gas radiation level prior to the suspected time of the mispositioning." Section 6 states, "An Upper Management representative will conduct an evaluation into the cause of the Control Rod mispositioning and implement immediate corrective actions prior to resuming routine Control Rod movements."

Contrary to the above, on September 18, 1992, after the Unit 2 NSO mistakenly inserted control rod H-1 from position 48 to 36, a movement greater than one even notch, all control rod movement was not discontinued. Specifically, the Unit 2 NSO's immediate action was to insert a control rod array from position 48 to position 06. Furthermore, with reactor power at greater than or equal to 20% rated core thermal power and the control rod mispositioning having occurred within the past 10 minutes, the NSO failed to insert control rod H-1 to position 00, failed to contact the Unit Operating Engineer or the Operations Duty Supervisor, failed to compare Off Gas radiation levels, and resumed routine control rod movements without an evaluation by an upper management representative into the cause of the mispositioning. (01033)

3. 10 CFR Part 50.9(a) requires, in part, that information required by license conditions to be maintained by the licensee shall be complete and accurate in all material respects.

DOA 300-12, Revision 2, Section D.5.d requires, in part, that the

NSO record data in the Unit log book, including the location of mispositioned control rod(s), the time of discovery of mispositioning, actions taken, and any other observations determined to be relevant.

Contrary to the above, the NSO failed to accurately maintain information required by license conditions in that the NSO failed to record in the Unit log book any information about a mispositioned control rod on September 18, 1992. This information is material because it is related to a condition adverse to quality, as described in Paragraph A above. (01043)

4. Dresden Administrative Procedures, (DAP) 07-29, "Reactivity Management Controls," Revision 0, Section F.1.g requires the station control room engineer (SCRE) to communicate to the NSO the requirements for procedural adherence, conservative response to abnormal reactivity events, and proper attitude toward reactivity controls.

   DOA 300-12, Revision 2, Section D.5.d requires, in part, that the NSO record data in the Unit log book, including the location of mispositioned control rod(s), the time of discovery of mispositioning, actions taken, and any other observations determined to be relevant.

   Contrary to the above, on September 18, 1992, the SCRE failed to communicate to the NSO the requirements for procedural adherence. Specifically, the SCRE failed to communicate to the NSO the requirements for procedural adherence concerning mispositioned control rods, in that the SCRE did not direct the NSO to record the mispositioning of control rod H-1 in the Unit log book. (01053)

5. DAP 07-01, "Operations Department Organization," Revision 15, August 1991, Section B.5.e, requires, in part, that the SCRE notify the Shift Engineer of any abnormal operating conditions.

   Contrary to the above, on September 18, 1992, the SCRE failed to report an abnormal operating condition involving a rod mispositioning event to the Shift Engineer. (01063)

6. 10 CFR Part 50.54(l) requires the licensee to designate individuals to be responsible for directing the licensed activities of licensed operators. Further, these individuals shall be licensed as senior operators pursuant to 10 CFR Part 55. DAP 07-01, "Operations Department Organization," Revision 15, Sections B.4.n and B.5.j, state that the responsibilities for directing the licensed activities of NSOs (i.e. reactivity management) were delegated to the shift engineer (SE) and/or the SCRE.

10 CFR 55.3 provides that a person must be authorized by a license issued by the Commission to perform the function of an operator or a senior operator as defined in this part.

Contrary to the above, on September 18, 1992, a qualified nuclear engineer (QNE) directed an NSO, a licensed reactor operator, to insert an out-of-sequence control rod array without the knowledge or approval of an SE or a SCRE. The QNE was not licensed pursuant to 10 CFR Part 55. (01073)

7. 10 CFR 50.9(a) requires, in part, that information required by license conditions to be maintained by the licensee shall be complete and accurate in all material respects.

DAP 14-14, "Control Rod Sequences," Revision 0, November 1991, Section F.1.d, requires, in part, that Special Instructions (Form 14-14C) provide the following: (a) list control rod movements which would help to clarify any specific event; (2) should be clearly stated and strictly adhered to; and (3) they be approved by a QNE and Operations Shift Supervisor.

Contrary to the above, on September 18, 1992, the QNE completed a Form 14-14C, which was not complete and accurate in all material respects, in that the Form 14-14C did not reveal a rod mispositioning event and that the movement of control rods after the rod mispositioning event was contrary to DOA 300-12. This information is material because it is a condition adverse to quality, as described in Paragraph A above. (01083)

This is a Severity Level III problem (Supplement I).

Pursuant to the provisions of 10 CFR 2.201, Commonwealth Edison Company (licensee) 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, within 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. If an adequate reply is not received within the time specified in this Notice, an order may be issued to show cause 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. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Dated at Lisle, Illinois
this 21st day of April 1994

SYNOPSIS

On December 17, 1992, an investigation was initiated by the U.S. Nuclear Regulatory Commission (NRC), Region III (RIII), Office of Investigation (OI), concerning an alleged deliberate attempt by certain Commonwealth Edison Company (CECo) employees working at the Dresden Nuclear Power Plant, Unit 2, to conceal a mispositioned control rod. Specifically, during the repositioning of control rods to change localized power levels within the reactor core, a nuclear station operator (NSO), who is an NRC licensed reactor operator, along with a qualified nuclear engineer (QNE) acting as a second verifier, moved an incorrect control rod. It was alleged that these two individuals, along with the station control room engineer (SCRE), and two nuclear engineers-in-training (NEIT), attempted to conceal this mispositioned rod movement incident. During the conduct of the investigation, two additional allegations were developed: (1) that the NSO and the SCRE, while meeting with the QNE and the two NEITs, behind the Unit 2 control panel, left the reactor control panel unattended; and (2) that the SCRE and the NSO provided false and misleading testimony to the OI:RIII investigators.

The OI investigation substantiated that the five CECo employees involved deliberately attempted to conceal the mispositioned control rod movement incident by failing to either document or report what occurred. The OI investigation did not substantiate the allegation that the reactor control panel was left unattended. The investigation substantiated that the SCRE and the NSO deliberately provided false and misleading statements to the OI:RIII investigators.