

NOTICE OF VIOLATION

Toledo Edison Company  
Davis-Besse Nuclear Power Station

Docket No. 50-346  
License No. NPF-3  
EA 86-72

During an inspection conducted during the period of November 4, 1985 - March 14, 1986, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1986), the violations are set forth below:

- I. Technical Specification (TS) Limiting Condition for Operation (LCO) 3.7.6.1 requires that two independent control room emergency ventilation systems (CREVS) be operable in Modes 1, 2, 3 and 4.

Technical Specification 1.6 defines operability and specifies as a condition for operability of a system that all auxiliary equipment required for the system or subsystem must be capable of performing its related support function.

Technical Specification 3.0.3 requires that when an LCO is not met the unit must be placed in a mode in which the specification does not apply by placing it in at least hot standby (Mode 3) within 6 hours, at least hot shutdown (Mode 4) within the following 6 hours and at least cold shutdown (Mode 5) within the subsequent 24 hours, as applicable.

- A. Contrary to the above, from July 2, 1977 to August 4, 1977, while the unit was in Modes 3 and 4, both trains of the CREVS were inoperable in that for both trains, both water and air cooled condensing units were inoperable. These units are required for the CREVS to perform its intended function. The CREVS service water valve control circuits for both trains would not permit the valves to open, thereby preventing operation of the water cooled condensing units, and during this period when operation was attempted using the air cooled condensing units, the refrigerant compressor motors of both trains would repeatedly trip on electrical overload. The unit was not placed in cold shutdown within the time required by TS LCO 3.0.3.
- B. Contrary to the above, for an indeterminate period of time, possibly since initial plant operation and until October 1985, both trains of the CREVS were inoperable in that the refrigerant compressor motors required for the CREVS to perform its intended function would repeatedly trip when the outside air temperature was below 15 degrees F. The unit was not placed in cold shutdown within the time required by TS LCO 3.0.3.
- II. 10 CFR Part 50, Appendix B, Criterion III, Design Control, as implemented by the Toledo Edison Nuclear Quality Assurance Manual (NQAM), Section 3, requires that measures shall be established to assure that applicable regulatory requirements and design bases are correctly translated into specifications, drawings, procedures, and instructions and that design changes shall be subject to design control measures commensurate with those applied to the original design.

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- A. Contrary to the above, design changes which increased heat loads in the area cooled by the CREVS were not subjected to design control measures commensurate with those applied to the original design to verify that the increases were within the cooling capacity of the CREVS. Examples of some design changes which occurred during the period 1980-1983 include the installation of the Post Accident Indicating Panels, Post Accident Monitoring Equipment Racks, Anticipatory Reactor Trip System, and Safety Parameter Display System. As a result, with the additional heat loads, the design capability of the CREVS was exceeded.
  - B. Contrary to the above, design control measures did not assure that design requirements were translated into specifications or drawings in that roof mounted air cooled condensing unit piping was not adequately protected from tornado missiles as described in the Davis-Besse Updated Safety Analysis Report.
- III. 10 CFR Part 50, Appendix B, Criterion XI, Test Control, as implemented by NQAM Section 11, requires that testing to demonstrate that structures, systems, and components will perform satisfactorily in service is identified and performed in accordance with written test procedures which incorporate the requirements contained in applicable design documents.
- A. Contrary to the above, at the time of the inspection the operational surveillance testing program (ST 5076.01.06) did not incorporate the applicable design requirements to demonstrate that the CREVS would operate as intended. The testing program failed to identify that the control dampers for the air cooled condensing units operated improperly and that the control circuits for the service water supply valves prevented opening of the valves.
  - B. Contrary to the above, in June 1979, after replacement of a control room airtight door (No. 509) without its sealing gaskets, work control documents had not identified that post-maintenance testing was necessary to verify that the required leak tightness of the control room was maintained.
- IV. 10 CFR Part 50, Appendix B, Criterion XVI, Corrective Action, as implemented by NQAM Section 16 and Administrative Procedure AD 1807.10, requires that measures be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected.
- A. Contrary to the above, on February 1, 1984, a Facility Change Request 84-0054 identified a condition which prevented the CREVS from performing its cooling function in cold weather; however, corrective action was not taken until October 1985.
  - B. Contrary to the above, on May 17, 1980 the licensee was informed by a letter from a contractor that control room door number 509 did not have required airflow sealing gaskets; however, corrective action was not taken by the licensee until February 1986.

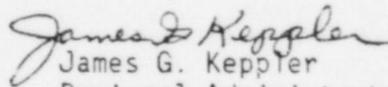
- V. Technical Specification 6.8.1.a requires that written procedures shall be established, implemented and maintained covering the activities recommended in Appendix A of Regulatory Guide 1.33, November, 1972. Regulatory Guide 1.33 specifies that procedures are required for the operation of the auxiliary building heating and ventilation system. The CREVS is a part of the auxiliary building heating and ventilation system.
- A. Contrary to the above, at the time of the inspection, the licensee had not established a procedure for elimination of nonessential heat loads in the control room area in the event that the CREVS allowed the control room temperature to reach its upper limit.
- B. Contrary to the above, at the time of the inspection, the licensee had not established a procedure to inform personnel that removing the air or water cooled CREVS condensing units from service would degrade the operability of the CREVS.
- VI. 10 CFR 50.72(b)(ii)(B), requires that a licensee notify the NRC as soon as practical and in all cases within one hour of the occurrence of any condition or event that results in the nuclear power plant being in a condition outside the design basis of the plant.

Contrary to the above, on February 1, 1984, the licensee identified that both trains of the CREVS were inoperable when outside temperatures were below 15° to 20°F and therefore resulted in the plant being in a condition outside the plant's design basis. The licensee did not report the condition to the NRC until November 1, 1985.

Collectively these violations have been categorized as a Severity Level III problem (Supplement I).

Pursuant to the provisions of 10 CFR 2.201, Toledo Edison Company is hereby required to submit to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region III, 799 Roosevelt Road, Glen Ellyn, IL 60137, within 30 days of the date of the letter transmitting this Notice, a written statement or explanation in reply including for each violation: (1) the reason for the violation if admitted; (2) the corrective steps which have been taken and the results achieved; (3) the corrective steps which will be taken to avoid further violations; and (4) the date when full compliance will be achieved. Where good cause is shown, consideration will be given to extending the response time.

FOR THE NUCLEAR REGULATORY COMMISSION

  
James G. Keppeler  
Regional Administrator

Dated at Glen Ellyn, Illinois,  
this 29<sup>th</sup> of July 1986.