

1. JT
2. JA

Docket No. 50-346

License No. NPF-3

Serial No. 1-490

January 14, 1985



RICHARD P. CROUSE
Vice President
Nuclear
(419) 259-5221

JA

Mr. James M. Taylor, Deputy Director
Office of Inspection and Enforcement
United States Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Taylor:

On November 21, 1984, the NRC transmitted to the Toledo Edison Company a Notice of Violation and Proposed Imposition of Civil Penalties (EA 84-95) for violations reported in Inspection Report No. 50-346/84-15 (DRP) (Log 1-1062). This letter and attachment represent the Toledo Edison Company's response under 10 CFR 2.201, to the five items of violation identified by the NRC in the Notice of Violation. Toledo Edison has elected not to protest the Proposed Imposition of Civil Penalties as provided by 10 CFR 2.205. A check for the full \$90,000 has been sent under separate cover to the Treasurer of the United States (see attached photocopy).

Following an examination of the Notice of Violation and an investigation into the circumstances surrounding the identified items of violation, the Attachment 1 enclosed provides Toledo Edison's assessment of the violations.

Toledo Edison reaffirms its commitment to proper administrative control of equipment in accordance with Technical Specifications. Through the measures described in the enclosed attachment, we believe that the recurrence of these incidents and similar incidents will be prevented and the operation of the Davis-Besse Nuclear Power Station can continue with full assurance of plant safety.

Very truly yours,

A handwritten signature in cursive script, likely belonging to Richard P. Crouse.

RPC:RFP:nlf
encl.

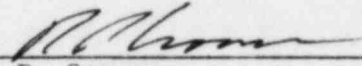
cc: Mr. J. G. Keppler, Regional
Administrator, Region III
DB-1 NRC Resident Inspector

IEIA
1/1

ATOMIC ENERGY ACT OF 1954
SECTION 182
SUBMITTAL IN RESPONSE
FOR THE
DAVIS-BESSE NUCLEAR POWER STATION
UNIT NO. 1
FACILITY OPERATING LICENSE NPF-3

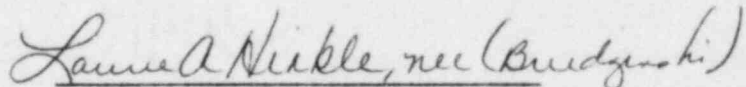
This letter is submitted in conformance with the Atomic Energy Act of 1954
Section 182 in response to Inspection Report No. 50-346/84-15 (Log No.1-1062).

By



R. P. Crouse
Vice President - Nuclear

Sworn to and subscribed before me this 14th day of January, 1985.



Laura A. Niekle, nee (Burdzyński)
Notary Public, State of Ohio
My Commission Expires May 16, 1986

I.A. Violation: Technical Specification 3.7.6.1, "Control Room Emergency Ventilation System," requires that two independent control room emergency ventilation systems shall be operable. A system is considered operable when it is capable of performing its specified function(s).

Technical Specification 6.8.1.a requires that written procedures be established, implemented and maintained covering the activities specified in Appendix A of Regulatory Guide 1.33, November 1972. Appendix A specifies typical safety-related activities that should be covered by written procedures. This includes procedures for operation of the control room emergency ventilation systems.

Administrative Procedure (AD) 1839.00, "Station Operations" requires that, prior to removal of safety-related equipment from service, operability of redundant safety-related equipment must be verified by inspection. In addition, this procedure requires that the applicable technical specification action statements be evaluated prior to the removal of the safety-related equipment from service.

Contrary to the above, both trains of the Control Room Emergency Ventilation System were removed from service on April 23, 1984 through May 7, 1984 without verifying the operability of the redundant equipment or evaluating applicable technical specification action statements. This rendered the Control Room Emergency Ventilation System inoperable in violation of technical specification requirements.

I.A. Response: (1) Admission or denial of the alleged violation.

Toledo Edison admits Violation I.A.

(2) The reasons for the violation, if admitted.

On May 7, 1984, during the performance of ST 5076.01, Control Room Emergency Ventilation Monthly Test, it was found that both Control Room Emergency Ventilation Chiller Control Power Switches were in the "OFF" position. This rendered the cooling function for both Control Room Emergency Ventilation System (EVS) Trains inoperable. The previous monthly surveillance test had been performed on Control Room EVS Channel 1 on April 9, 1984 and on Channel 2 on April 23, 1984. Toledo Edison's investigation of this incident dis-

closed nothing to indicate that the switches had been left in the "OFF" position after these tests and concluded that the cause of the event was a personnel error of an undetermined origin. A further contributing factor may have been the inadequate labeling of the chiller switches themselves.

(3) Corrective steps taken and results achieved.

When no apparent reason was found for the Control Room Emergency Ventilation Chiller Control Power Switches being in the "OFF" position, the operator was instructed to place the switches to the "ON" position. Surveillance Test ST 5076.01 was then successfully run on both Control Room EVS units.

(4) Corrective action taken to avoid further noncompliance.

Identification labels were put next to the Control Room Emergency Ventilation Chiller Control Power Switches to clarify their purpose and to alert personnel that the Shift Supervisor must be notified prior to turning the switches to "OFF". Also, the panels on which the switches are located were more clearly labeled.

Surveillance Test ST 5076.01 was modified to identify the significance of these switches on Control Room EVS operability.

The preventative maintenance work order was modified to identify the potential effects of preventive maintenance on Control Room EVS operability and to require that the switches be verified to be in the "ON" position following maintenance. Personnel performing maintenance of the Control Room EVS were counseled regarding the seriousness of this incident.

A program has been established to review maintenance work orders for their effect on system operability. The review conducted by a Senior Reactor Operator qualified individual consists of verifying system operability requirements prior to conducting maintenance and verifying that post maintenance testing is adequate for returning the system to service.

- (5) Date when full compliance will be achieved.

Full compliance with corrective actions has been achieved.

I.B. Violation:

Technical Specification 6.8.1 requires that written procedures be (sic) established, implemented and maintained covering the activities specified in Appendix A of Regulatory Guide 1.33, November 1972. The activities specified in Appendix A, Section A, Administrative Procedures, include procedure adherence, shift and relief turnovers and log entries. Appendix A, Section C, "Procedures for Startup, Operation, and Shutdown of Safety Related PWR Systems," list the feedwater system as requiring instructions for energizing startup and shutdown of the system.

Contrary to the above, on June 24, 1984, the licensee failed to start the startup feed pump in accordance with the applicable sections of the approved procedures (SP 1105.27 and SP 1106.27) for operation of the startup feed pump; failed to log the starting of the startup feed pump in the reactor operator's log; and improperly initialed the trip recovery procedure (PP 1102.03) indicating that the startup feed pump was started per an approved procedure (SP 1106.27). In addition, on June 25, 1984, the licensee failed to shutdown or restore the startup feed pump to normal in accordance with the applicable sections of the approved procedures (SP 1105.27 and SP 1106.27); improperly initialed the plant startup procedure (PP 1102.2) indicating the startup feed pump was stopped per the approved procedure (SP 1106.27); failed to perform an adequate turnover regarding the status of the startup feed pump system; and failed to properly sign off the completion of Section 8 of the startup procedure (PP 1102.2).

- I.B. Response: (1) Admission or denial of the alleged violation.

Toledo Edison admits to Violation I.B.

(2) The reasons for the violation, if admitted.

At the time the violation occurred, Davis-Besse procedures required the use of the Main Feedwater Pumps (MFWP) to support the plant startup and shutdown feedwater needs. This procedural requirement was in place due to the potential line break hazard which use of the Startup Feedwater Pump (SUFFP) would present to the Auxiliary Feedwater System (AFW). Thus, as per procedural requirements, the MFWP were being utilized in the recovery process from a reactor trip on June 24, 1984. As trip recovery progressed, problems developed with the controls which resulted in oscillations in both steam generator level and feedwater pressure. These oscillations, coupled with a steam supply problem related to the auxiliary boiler, led to the decision to utilize the SUFFP for trip recovery despite the line break hazard.

The SUFFP was placed in operation in parallel with No. 1-2 Main Feedwater Pumps (MFP). Starting of the SUFFP was inadvertently not logged in the Reactor Operator's log. PP 1102.03, Trip Recovery Procedure, was, however, initialed signifying the pump was in service. It is important to note that the SUFFP was placed in service correctly, even though the procedure was not completely signed off. Proper initiation was verified by observing pump conditions such as feedwater flow and pump motor current.

During the subsequent plant startup on June 25, 1984, a main feedwater pump was placed in service and the SUFFP was shut down. As is required by previous Toledo Edison commitments to the NRC, isolation of the SUFFP was initiated. The guidance provided to the operator for isolating the SUFFP was, however, informal in that it consisted of a handwritten list of valve position changes and control power fuse removals, instead of the use of the appropriate procedure which contained this guidance. Before the isolation task could be completed, the operator was directed to perform a higher priority evolution. He informed his supervisor (the Assistant Shift Supervisor) that the SUFFP suction valve FW32 had not been closed. The Assistant Shift Supervisor inadvertently failed to pass this information to the relieving shift. Later in the day on June 25, the on-duty Assistant Shift Supervisor requested an independent verification of the SUFFP isolation. The verification was performed with the exception of the

verification of FW32 closure. The operator mistakenly identified FW33, a similar valve located in close proximity to FW32, as FW32 and, therefore, did not note that FW32 was in the open position rather than the required closed position. Therefore, the SUFF was not isolated properly and remained in this condition until July 1, 1984, when another operator discovered FW32 open during a routine observation tour. He immediately closed the valve and notified the Shift Supervisor of this event.

(3) Corrective steps taken and results achieved.

On July 1, 1984, after finding the SUFF suction valve, FW32, open, the Operations Engineering Supervisor directed the Shift Supervisor to reverify the remaining isolation valves closed and fuses for the SUFF removed. Additionally, "Do Not Operate" tags were placed on these components to prevent future inadvertent operation.

All Operations shift personnel were cautioned by the Operations Engineer about the need to operate the plant in accordance with approved procedures, and that it is imperative to properly utilize applicable procedures. Additionally, the Shift Supervisor and Assistant Shift Supervisor involved with this incident were counseled on the importance of their direct supervision of plant activities and of the necessity to remain cognizant of all ongoing activities, especially during plant startups and reactor trips. Specifically, it was stressed that simultaneous performance of plant evolutions must be limited to a number that could be appropriately controlled, and that complete and accurate shift turnovers are essential to safe plant operation.

(4) Corrective action taken/to be taken to avoid further noncompliance.

Procedure AD 1839.00, Station Operations, has been modified to reinforce the requirement of signing procedural steps and an additional new requirement that a Senior Reactor Operator (SRO) evaluate any procedural steps which are determined not applicable for the plant conditions has been initiated.

- (5) Date when full compliance will be achieved.

Full compliance with corrective actions has been achieved.

II. Violation:

10 CFR 50.59(a)(1) states that the licensee may make changes in the facility as described in the Safety Analysis Report... without prior Commission approval provided that the proposed change... does not involve a change in the Technical Specifications incorporated in the license or an unreviewed safety question.

10 CFR 50.59 requires that the licensee maintain records of changes in the facility to the extent that such changes constitute changes to the facility as described in the Safety Analysis Report. These records shall include a written safety evaluation which provides the basis for the determination that the change does not involve an unreviewed safety question.

Contrary to the above, in the following instances, the licensee made changes in the facility as described in the Safety Analysis Report without preparing a written safety evaluation of whether the change involved a change in the Technical Specifications or an unreviewed safety question.

- (1) On November 1, 1983, the licensee removed one of two Emergency Diesel Generator (EDG) ventilation supply fans from service without preparing a written safety evaluation and without realizing this action represented a change in the facility as described in the Updated Safety Analysis Report (USAR). The USAR describes the EDG ventilation supply as containing two 50% capacity fans.
- (2) On December 19, 1982, the licensee initiated a Facility Change Request (FCR) that was implemented on May 24, 1983 which changed the position (to open) of the Start-up Feedwater Pump (SUFPP) suction valve during power operation without preparing a written safety evaluation. The USAR describes the valve as closed during power operation.
- (3) On March 8, 1984 and May 4, 1984 lead shielding was hung on decay heat system piping changing the loading of the safety system as described in the FSAR and

without preparing a written safety evaluation.

II.1.Response: (1) Admission or denial of the alleged violation.

Toledo Edison admits to Violation II.1.

(2) Reason for the violation, if admitted.

On November 1, 1983, #1 Emergency Diesel Generator (EDG) Room Ventilation Fan was taken out of service for maintenance. The individual preparing the Maintenance Work Order (MWO) had reviewed the Updated Safety Analysis Report (USAR). Based on that review, he incorrectly concluded that the maintenance activity would not affect the operability of the EDG. In accordance with AD 1844.00, Maintenance, the Shift Supervisor reviewed the MWO. This review also incorrectly resulted in a determination that this maintenance activity would not affect EDG operability. Based on these determinations, no written safety evaluation was performed since none of the 10 CFR 50.59 criteria requiring safety evaluation were met.

(3) Corrective steps taken and results achieved.

Maintenance was performed and the fan was placed back in service prior to determining that a violation had occurred.

(4) Corrective action taken to avoid further noncompliance.

Procedure SP 1107.11, Emergency Diesel Generator Operating Procedure, was modified to include the requirement that both EDG Room Ventilation Fans are required to maintain the EDG in an operable condition.

A major revision was issued to AD 1844.00, Maintenance, on March 31, 1984. Enclosures 12 and 13 of AD 1844.00, which provide instructions for Technical Specification equipment operability were expanded to provide additional guidance on equipment operability to support the operation of certain Technical Specification equipment. Training was provided to Maintenance Staff personnel on AD 1844.00, and emphasized the importance of proper use of Enclosures 12 and 13.

Additionally, as identified in response to Violation I.A, a program has been established whereby Maintenance

Work Orders receive an independent review by a Senior Reactor Operator (SRO) qualified individual to verify operability requirements are satisfied and post maintenance testing is appropriate.

- (5) Date when full compliance will be achieved.

Full compliance with corrective actions has been achieved.

II.2. Response:(1) Admission or denial of the alleged violation.

Toledo Edison admits to Violation II.2.

- (2) Reason for violation, if admitted.

It should be noted that the only reference to the SUFP suction valve (FW32) in the Davis-Besse Updated Safety Analysis Report (USAR) is its placement on plant Piping & Instrument Diagram (P&ID) M006B. On this drawing the valve was shown as normally closed. Normal plant operation in the 1982-1983 time frame utilized FW32 in the open position. For this reason a drawing change was initiated to P&ID M006B to show FW32 as a normally open valve consistent with plant operation. Although P&ID M006B was contained in the USAR, the Toledo Edison interpretation of the 10 CFR 50.59 term "as described in the Safety Analysis Report", being used at the time this violation occurred, did not include such non-Q-list components. Since FW32 was not a Q-list component and was not referenced in any text portion of the USAR, no written safety evaluation was performed prior to initiating the drawing change.

- (3) Corrective action taken and results achieved.

Procedure SP 1106.27, Startup Feed Pump Operating Procedure, has been modified to require that FW32 be maintained in the closed position when the SUFP is not being used. Also a drawing change has been initiated by FCR 84-218 to change P&ID M006B to reflect the normally closed condition for FW32.

- (4) Correction action taken to avoid further noncompliance.

A revision to the Davis-Besse Facility Change Request (FCR) procedure will be made such that changes to components shown on USAR drawings will require

evaluation under 10 CFR 50.59 prior to implementation whether the component is on the Q-list or not.

- (5) Date when full compliance will be achieved.

The drawing change to P&ID M-006B to reflect the normally closed condition for FW32 will be completed by January 31, 1985.

Revisions to the FCR procedures will be completed by March 29, 1985.

II.3. Response:(1) Admission or denial of the alleged violation.

Toledo Edison admits to Violation II.3.

- (2) Reasons for violation, if admitted.

Lead shielding is placed on pipes in order to keep radiation exposures as low as reasonably achievable. In the course of previous placement of lead shielding, Toledo Edison was advised by Bechtel, in letter BT-13024 of May 14, 1982, that generic guidelines for use of lead blankets was not feasible because of the many variables involved. Bechtel, therefore, advised that a case-by-case safety review be performed prior to long term use of lead blankets. As a result of this guidance, Toledo Edison interpreted that short term use of lead shielding did not require a written safety evaluation.

- (3) Corrective steps taken and results achieved.

Toledo Edison received IE Information Notice 83-64 on October 3, 1983. Evaluation of this Information Notice was not completed until May 1, 1984. On May 22, 1984, after the evaluation of IE Information Notice 83-64, all locations where temporary shielding was being used were identified and field walkdowns conducted and documented on Nonconformance Reports (NCR's 84-0070, 84-0071, 84-0073, 84-0074), for each installation. These NCR's were then forwarded to Nuclear Facility Engineering for review and disposition.

During the Performance Appraisal Inspection of July 30, 1984 through August 24, 1984, when this potential enforcement action was identified, the NRC identified short term use of lead shielding to be a failure to perform a safety evaluation pursuant to 10 CFR 50.59.

As a result, Toledo Edison removed all temporary lead shielding and halted maintenance activities in these areas until written safety evaluations were conducted.

The safety evaluation for the lead shielding hung on the decay heat system piping on March 8, 1984 and May 4, 1984, was completed on December 14, 1984. The analysis indicated that all stress levels are within the IE Bulletin 79-14 interim criteria.

- (4) Corrective action taken/to be taken to avoid further noncompliance.

On December 18, 1984, an internal memorandum was distributed to all Chemistry & Health Physics personnel emphasizing that lead shielding cannot be applied to any safety related or Q-System without a 10 CFR 50.59 written safety evaluation.

Procedures for controlling the use of temporary shielding are being developed. Until these procedures are developed, Toledo Edison will use Nonconformance Reports in the interim for providing a safety evaluation for application and removal of temporary shielding. A nonconformance report is submitted and dispositioned prior to actual use of lead shielding and the process of dispositioning requires the preparation of a safety evaluation. Permanent lead shielding is being handled by the Facility Change Request process. Safety evaluations have been performed for all lead shielding currently in use at Davis-Besse.

- (5) Date when full compliance will be achieved.

Development and implementation of a procedure for controlling temporary shielding will be completed by March 29, 1985.