



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

July 16, 1985

*Toledo Ed.  
JTE*

The Honorable Edward Markey, Chairman  
Subcommittee on Energy Conservation and Power  
Committee on Energy and Commerce  
United States House of Representatives  
Washington, DC 20515

Dear Mr. Chairman:

Enclosed please find a notice of violation issued to Toledo Edison Company for violations at the Davis Besse Nuclear Power Station.

Sincerely,

*Edward Fay*  
Carlton Kammerer, Director  
Office of Congressional Affairs

Enclosure:  
As stated

cc: Rep. Carlos Moorhead

IDENTICAL LETTER SENT TO:  
Sen. Simpson/cc: Sen. Hart  
Rep. Udall/cc: Rep. Lujan  
Sen. Glenn ✓  
Sen. Metzenbaum  
Rep. Latta  
Rep. Kaptur

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PDR FOIA  
JACOBS85-478 PDR



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION III  
799 ROOSEVELT ROAD  
GLEN ELLYN, ILLINOIS 60137

July 12, 1985

Docket No. 50-346  
EA 85-71

Toledo Edison Company  
ATTN: Mr. John P. Williamson  
Chairman and Chief Executive Officer  
Edison Plaza  
300 Madison Avenue  
Toledo, OH 43652

Gentlemen:

This refers to the safety inspection conducted by Messrs. W. Rogers, D. Kosloff, and M. Ring of the Region III staff during the period April 9 - May 31, 1985 of activities authorized by Operating License No. NPF-3 for the Davis-Besse Nuclear Power Station. Three violations of Technical Specification and procedural requirements, as well as other failures to comply with NRC regulatory requirements, were identified during this inspection. The results of this inspection were discussed on May 24, 1985 during an Enforcement Conference held in the Region III office between Mr. R. P. Crouse and others of your staff and myself and others of the NRC staff.

Violation I in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty (Notice) involved a failure to effectively implement a program in which the operating status of equipment was to be made known to cognizant plant personnel at all times. This failure was a result of inadequate communications between security and operations personnel. Specifically, on April 9, 1985, the security-fire/radiation computer was taken out of service and the shift supervisor was not notified at the time the computer was actually shutdown. The shift supervisor did not learn of the computer shutdown until he discovered it two hours later. As a result, while the computer was shutdown, the shift supervisor was unable to take timely compensatory measures to ensure adequate fire protection controls were maintained. We are aware that additional compensatory measures were not actually necessary because measures had already been taken in response to other problems related to fire protection. However, the pre-existing compensatory measures do not excuse the inadequate communications between the security and operations personnel.

Violation II in the enclosed Notice involves failure to monitor pipe leakage from the Startup Feedwater Pump/Turbine Cooling Water systems. Monitoring was specifically required by a License Condition because pipe leakage or rupture in this area had not been analyzed for the effects of jet impingement, pipe whip, and flooding upon the auxiliary feedwater pumps. On April 24, 1985, the non-licensed operator who had been assigned to monitor the Startup Feedwater Pump/Turbine Plant Cooling Water piping status in the Auxiliary Feedwater Pump

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Room was found by an NRC inspector to be asleep. Therefore, he would not have been able to perform his required function which was to trip the Startup Feedwater Pump locally or notify the Control Room operator to trip the pump if leakage occurred. We are also concerned that corporate management was not promptly informed of this incident by site management.

Violation III in the enclosed Notice involves the failure to maintain proper reactor power for the indicated reactor coolant flow rate. On April 19 and 20, 1985, the licensee recorded reactor coolant flow rate values approximately 2% below the Technical Specification flow rate limit. Licensee personnel failed to recognize that a valved-out component continued to provide erroneous input to the computer heat balance calculation. This affects the operator's primary indication of thermal power and as a result, the thermal power was not reduced to the correct thermal power limit required by Technical Specification requirements.

To emphasize the importance of effective communications within your organization to ensure that when problems are identified, root causes are found and adequate corrective actions are taken, I have been authorized, after consultation with the Director, Office of Inspection and Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the cumulative amount of One Hundred Thousand Dollars (\$100,000). These violations are categorized as a Severity Level III problem in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985). The base civil penalty for a Severity Level III problem is \$50,000. However, the base amount has been increased by 100% because of Davis-Besse's previous poor performance discussed below.

During a September 23, 1982 Systematic Assessment of Licensee Performance (SALP), we identified weaknesses in the licensee's ability to recognize requirements for equipment operability. In March of 1983, as a result of an Enforcement Conference, the licensee committed to implement a Comprehensive Corrective Action Program to address these and other concerns. These concerns were expressed again during an October 28, 1983 SALP. However, actions taken to address these concerns were ineffective and similar violations were identified which resulted in the issuance of a Notice of Violation and Proposed Imposition of Civil Penalties in November 1984. This enforcement action was based on failures to ensure that the status of plant equipment was understood by the responsible individuals and failure to take adequate corrective actions. The air conditioning portions of both trains of the Control Room Emergency Ventilation System were removed from service without complying with station procedures, thus rendering the system inoperable in violation of Technical Specification requirements. In addition, removal of one of two Number One Emergency Diesel Generator ventilation fans for maintenance made the Number One Emergency Diesel Generator inoperable and Technical Specification action statements could not be satisfied due to the failure of the licensee to recognize this condition. Problems were also identified with the Startup Feedwater Pump System, yet the licensee failed to ensure that adequate actions were taken to correct the problems identified and to preclude repetition of the problems.



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The causes of the previous violations were similar to some of the failures identified during the April 1985 inspection which are the subject of the enclosed Notice, and it appears that the licensee still has not developed adequate management controls to ensure that problems are communicated to the appropriate responsible individuals so that root causes can be identified and generic corrective actions taken. As is evident from the recent events which occurred on June 9, 1985, problems continue to exist at Davis Besse and additional enforcement action may be required.

You are required to respond to the enclosed Notice and you should follow the instructions specified therein when preparing your response. Your reply to this letter and the results of future inspections will be considered in determining whether further enforcement action is warranted.

In accordance with 10 CFR 2.790, "Rules of Practice," a copy of this letter and the enclosure will be placed in the NRC Public Document Room.

The responses directed by this letter and the accompanying Notice are not subject to the clearance procedure of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

Sincerely,

  
James G. Keppler  
Regional Administrator

Enclosures:

1. Notice of Violation and  
Proposed Imposition of  
Civil Penalty
2. Inspection Report  
No. 50-346/85018(DRP)

cc w/enclosures:

R. P. Crouse, Vice President Nuclear  
S. Quennoz, Station Superintendent  
DMB/Document Control Desk (RIDS)  
Resident Inspector, RIII  
Harold W. Kohn, Ohio EPA  
James W. Harris, State of Ohio  
Robert H. Quillin, Ohio  
Department of Health

Distribution

PDR

SECY

CA

ACRS

JTaylor, IE

RVollmer, IE

JKeppler, RIII

JAxelrad, IE

JCollins, IE

ABBeach, IE

JLieberman, ELD

VStello, DED/ROGR

Enforcement Coordinators

RI, RII, RIII, RIV, RV

HDenton, NRR

BHayes, OI

SConnelly, OIA

FIngram, PA

JCrook, AEOD

EJordan, IE

JPartlow, IE

BGrimes, IE

ES File

EA File

DCS

NOTICE OF VIOLATION  
AND  
PROPOSED IMPOSITION OF CIVIL PENALTY

Toledo Edison Company  
Davis-Besse Nuclear Power Station

Docket No. 50-346  
License No. NPF-3  
EA 85-71

An inspection conducted during the period April 9 - May 31, 1985 identified three violations of NRC requirements. These violations involved the failure to follow a procedure that required responsible individuals to be notified at the time the security and fire protection computer was shutdown, the failure of a non-licensed operator to monitor piping status in the Auxiliary Feedwater Pump area because he was sleeping, and the failure to limit thermal power as required by the Technical Specifications when the reactor coolant flow rate decreased.

To emphasize the importance of effective communications within your organization and to ensure that when problems are identified, root causes are found and adequate corrective actions are taken, the NRC proposes to impose a civil penalty in the amount of One Hundred Thousand Dollars (\$100,000). In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985), and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2282, PL 96-295, and 10 CFR 2.205, the particular violations and the associated civil penalty is set forth below:

- I. 10 CFR Part 50, Appendix B, Criterion XIV, "Inspection, Test, and Operating Status," requires measures be established for indicating the operating status of structures, systems, and components of the nuclear power plant. The Toledo Edison Nuclear Quality Assurance Manual (NQAM) Section 14.0 requires that the plant manager be responsible for establishing and maintaining a program in which the operating status of equipment is known at all times. Section 14.1.1.1 of the NQAM requires that permission to release equipment or systems for maintenance or test be granted by the Shift Supervisor.

Contrary to the above, on April 9, 1985, the licensee did not implement its program to ensure that the operating status of equipment is known at all times. The security-fire/radiation computer was removed from service, without permission being granted by the Shift Supervisor. The Shift Supervisor became aware of the computer shutdown when the computer was being returned to service.

- II. Amendment No. 83 of Facility Operating License No. NPF-3 adds paragraph 2.C(3)(t) which states, "Toledo Edison shall operate the Startup Feedwater Pump (SUFP) with the following operational restrictions:  
1. Toledo Edison will station an operator in the Startup Feedwater Pump/Auxiliary Feedwater Pump (SUFP/AFW) area during operation of the SUFP to monitor SUFP/Turbine Plant Cooling Water (TPCW) piping status in the AFW Pump Rooms."

Contrary to the above, at approximately 1210 on April 24, 1985, during

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operation of the SUFP, the NRC inspector observed that a non-licensed operator who had been assigned to monitor the SUFP/TPCW piping status in the AFW Pump Room was asleep and, therefore, failed to perform the required monitoring.

- III. Technical Specification 3.2.5 requires that if the reactor coolant flow rate exceeds its limit, then flow must be restored to within its limit within 2 hours or thermal power must be limited at least 2% below rated thermal power for each 1% of flow that is outside the limit for four-pump operation within the next 4 hours.

Contrary to the above, from 1150 on April 19, 1985 to 0250 on April 20, 1985, while at approximately 98% power, the licensee recorded a reactor coolant flow rate 1.79% to 2.065% low. Since flow was not restored to its limit within 2 hours, thermal power was required to be limited to between 96.42% and 95.87%. From approximately 1720 on April 19, 1985 until approximately 0220 on April 20, 1985 (9 hours), thermal power was approximately 98%. This exceeded the thermal power limit of Technical Specification 3.2.5.

Collectively, the above three violations have been evaluated as a Severity Level III problem (Supplement I).

(Civil Penalty - \$100,000 assessed equally among the violations)

Pursuant to the provisions of 10 CFR 2.201, Toledo Edison Company is hereby required to submit to the Director, Office of Inspection and Enforcement, U. S. Nuclear Regulatory Commission, Washington, DC 20555 and a copy 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 this Notice a written statement or explanation, including for each alleged violation, (1) admission or denial of the alleged violation; (2) the reasons for the violation, if admitted; (3) the corrective steps which have been taken and the results achieved; (4) the corrective steps which will be taken to avoid further violations; and (5) the date when full compliance will be achieved. 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.

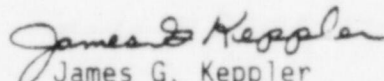
Within the same time as provided for the response required above under 10 CFR 2.201, Toledo Edison Company may pay the civil penalty in the amount of \$100,000 or may protest imposition of the civil penalty in whole or in part, by a written answer. Should Toledo Edison Company fail to answer within the time specified, the Director, Office of Inspection and Enforcement will issue an order imposing the civil penalty proposed above. Should Toledo

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Edison Company elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty such answer may: (1) deny the violation listed in the Notice, in whole or in part; (2) demonstrate extenuating circumstances; (3) show error in this Notice; or (4) show other reasons why the penalty should not be imposed. In addition to protesting the civil penalty, in whole or in part, such answer may request remission or mitigation of the penalty. In requesting mitigation of the proposed penalty, the five factors contained in Section V(b) of 10 CFR Part 2, Appendix C 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 statements or explanations by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. Toledo Edison Company's attention is directed to the other provisions of 10 CFR 2.205 regarding the procedures for imposing a civil penalty.

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

FOR THE NUCLEAR REGULATORY COMMISSION

  
James G. Keppler  
Regional Administrator

Dated at Glen Ellyn, Illinois  
this 12<sup>th</sup> day of July 1985



U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-346/85018(DRP)

Docket No. 50-346

License No. NPF-3

Licensee: Toledo Edison Company  
Edison Plaza, 300 Madison Avenue  
Toledo, Ohio 43652

Facility Name: Davis-Besse 1

Inspection At: Oak Harbor, OH

Inspection Conducted: April 9 through May 31, 1985

Enforcement Conference: May 24, 1985

Inspectors: W. Rogers  
D. Kosloff  
M. Ring

Approved By: *E. E. Tiersman*  
T. N. Jackiw, Chief  
Projects Section 2B

6/13/85  
Date

Inspection Summary

Inspection on April 9 through May 31, 1985 (Report No. 50-346/85018(DRP))  
Areas Inspected: Special inspection of the circumstances surrounding three events: removal of the security and fire protection computer from service without the shift supervisor being informed; exceeding the thermal power for the reactor coolant flow available and having one channel of the reactor protection system set lower than the allowable setpoint; and the discovery of a non-licensed operator asleep while implementing a condition of the license. The inspection involved 27 inspector-hours onsite by two NRC inspectors.  
Results: Three items of noncompliance were identified (failure to notify appropriate personnel that fire detection equipment was removed from service; failure to perform the action statements of Technical Specification 3.2.5 associated with reactor power and reactor protection system setpoints; and failure to properly implement a condition of the license associated with operation of the startup feedwater pump).

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## DETAILS

### 1. Persons Contacted

T. Murray, Assistant Vice President, Nuclear Mission  
S. Quennoz, Plant Manager  
W. O'Conner, Operations Superintendent  
L. Simon, Operations Supervisor  
J. Lingenfelter, Technical Superintendent

The inspectors also interviewed other licensee employees, including members of the technical, operations, maintenance, I&C, training and health physics staff.

### Enforcement Conference on May 24, 1985

#### Toledo Edison Personnel

R. Crouse, Vice President, Nuclear Mission  
T. Murray, Assistant Vice President, Nuclear Mission  
S. Quennoz, Plant Manager  
R. Peters, Nuclear Licensing Manager

#### NRC Personnel

J. Keppler, Administrator, Region III  
C. Norelius, Director, Division of Reactor Projects  
W. Shafer, Chief, Projects Branch 2  
I. Jackiw, Chief, Projects Section 2B  
W. Rogers, Senior Resident Inspector  
D. Kosloff, Resident Inspector  
M. Ring, Reactor Inspector  
M. McCormick-Barger, Reactor Inspector  
B. Berson, Legal Counsel  
W. Schultz, Enforcement Coordinator

### 2. Inoperable Fire Protection Computer

While reviewing the unit log on April 9, 1985 the inspector noted that the security and fire protection computer had been shutdown for maintenance from 0915 to 1120 and the Shift Supervisor had no knowledge of the shutdown. The Toledo Edison Nuclear Quality Assurance Manual (NQAM) Section 14.0 requires that the plant manager establishes and maintains a program in which the operating status of equipment is known at all times. Section 14.1.1.1 of the NQAM further requires that the shift supervisor grant permission to release equipment or systems for maintenance or test. Failure to inform the shift supervisor of the equipment status at all times is considered a violation (346/85018-01). A discussion of the occurrence with the shift supervisor revealed that although he had been informed that the security and fire protection computer was to be shutdown for maintenance that morning he was not notified at the time the computer was actually shutdown. He established

fire watch patrols in accordance with existing plant procedures after his independent discovery that the computer had been shutdown. During the enforcement conference the licensee stated that the areas in question were being patrolled due to fire protection equipment other than the fire detectors being out of service. The licensee further stated that the security supervisor has been designated as the individual to inform the shift supervisor when the computer is taken out of service.

### 3. Inaccurate Reactor Power Measurements

The limiting condition for operation of Technical Specification 3.2.5 requires reactor coolant flow to be equal to or greater than a specific value. The action statement associated with this limiting condition requires that, within four hours, reactor power be reduced by 2% for every 1% that flow is less than the given value. From approximately 1720 on April 19, 1985 until approximately 0220 on April 20, 1985 thermal power was approximately 98%. At this time the limit for thermal power was between 96.42% and 95.8%. Failure to maintain proper reactor power for the indicated reactor coolant flow is considered an item of noncompliance (346/85018-02). The events surrounding this condition are discussed in Inspection Report No. 85009. During the enforcement conference the licensee confirmed that for approximately twelve hours one of the four reactor power indicators was set less than actual reactor power by 2.2% during the same time period in question. This indicator provides an input to the Reactor Protection System (RPS). These examples were the result of the licensee's failure to recognize that a feedwater flow indicator that had failed a week before provided an input to the computer heat balance calculation which is the standard by which the reactor power indicators are calibrated and which is the operators' primary indication of reactor thermal power.

### 4. Startup Feedwater Pump Piping Monitoring

While touring the startup feedwater pump/auxiliary feedwater pump (SUFP/AFWP) area on April 24, 1985 at approximately 1210 the inspector observed that the only other person in the room was a sleeping non-licensed operator. The plant was in hot standby and the SUFP was in operation. Paragraph 2.C.(3)(t) of the facility's operating license requires that the licensee station an individual in the SUFP/AFWP area during operation of the SUFP to monitor the SUFP/turbine plant cooling water (TPCW) piping status in the room. In the event of SUFP/TPCW pipe leakage the operator is to trip the SUFP locally or notify the control



room to trip the SUFP, and isolate the SUFP/TPCW piping. Failure to properly monitor the SUFP/TPCW piping status is considered an item of noncompliance (346/85018-03). Subsequently, another licensee employee entered the room and awakened the operator in the presence of the inspector. The inspector notified the operator's supervisors of the occurrence. The licensee took disciplinary action against the sleeping individual.

5. Enforcement Conference

An Enforcement Conference was held on May 24, 1985 in the NRC Region III office to discuss the circumstances surrounding the violations identified during the inspection that was initiated on April 9, 1985.

The meeting was opened by Mr. J. G. Keppler, Regional Administrator. He described in general terms the violations that were identified during the inspection. The licensee representatives were informed that individually the three violations were not cause for serious concern; however, more importantly there was an apparent overall breakdown in communication between site and corporate management as well as between corporate managers. The licensee representatives admitted they did not learn of the violations in a timely manner and were not directly involved in the corrective actions that were taken. The plant manager described corrective actions that had been taken to resolve each of the violations. The NRC staff concluded that these actions addressed the specific problems but did not adequately deal with the root cause which was lack of management oversight and communication. The licensee representatives expressed their concern, said they understood the problem and would take immediate steps to ensure that Davis-Besse management would become more involved in plant operation.