

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of

Indiana and Michigan Electric Company
Donald C. Cook Nuclear Plant
Units 1 and 2

Docket Nos. 50-315
50-316
Licenses No. DPR-45
DPR-74
EA 82-03

ORDER IMPOSING CIVIL MONETARY PENALTIES

I

Indiana and Michigan Electric Company (the "licensee") is the holder of Operating Licenses No. DPR-45 and No. DPR-74 (the "licenses") issued by the Nuclear Regulatory Commission (the "Commission"). These licenses authorize the operation of Units 1 and 2 of the Donald C. Cook Nuclear Plant near Bridgman, Michigan. These licenses were issued on October 25, 1974 and December 23, 1977.

II

As a result of inspections of the licensee's facilities by the Nuclear Regulatory Commission's Office of Inspection and Enforcement during the period June 1 through August 13, 1981, the NRC staff determined that in several instances the licensee failed to adequately implement its fire protection program. In addition, the performance of a leak rate test resulted in a breach of containment integrity for approximately 60 hours. The NRC served the licensee a written Notice of Violation and Notice of Proposed Imposition of Civil Penalties by letter dated December 30, 1981. The Notice stated the nature of the violations, the provisions of the Atomic Energy Act, the Nuclear Regulatory Commission's

regulations or license conditions that were violated, and the amount of the civil penalty proposed for each violation. The licensee responded to the Notice of Violation and Notice of Proposed Imposition of Civil Penalties with a letter dated March 1, 1982.

III

Upon consideration of Indiana and Michigan Electric Company's response (March 1, 1982) and the statements of fact, explanation, and argument in denial or mitigation contained therein as set forth in the Appendix to this Order, the Director of the Office of Inspection and Enforcement has determined that, with the exception of Items I.A, I.B, and I.F, the violations did occur as set forth in the Notice of Violation. The proposed civil penalties for Items I.A, I.B, I.C, I.D, I.E, and I.F were based upon serious weaknesses in the management of the fire protection program. Items I.A and I.B addressed the operability of fire doors and fire detection instrumentation. After consideration of the licensee's response to Items I.A and I.B, including proposed corrective actions, Item I.A has been withdrawn and Items I.B and I.F have been revised. Therefore, in view of the significance of the remaining items and in accordance with the NRC Enforcement Policy, the proposed civil penalties for Items I.A through I.F are withdrawn. However, the status of civil penalties for all remaining violations designated in the Notice of Violation has not changed.

IV

In view of the foregoing 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, IT IS HEREBY ORDERED THAT:

The licensee pay civil penalties in the total amount of Fifty Two Thousand Dollars within thirty days of date of this Order, by check, draft, or money order payable to the Treasurer of the United States and mailed to the Director of the Office of Inspection and Enforcement, USNRC, Washington, D.C. 20555.

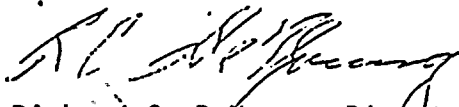
V

The licensee may within thirty days of the date of this Order request a hearing. A request for a hearing shall be addressed to the Director, Office of Inspection and Enforcement. A copy of the hearing request shall also be sent to the Executive Legal Director, USNRC, Washington, D.C. 20555. If a hearing is requested, the Commission will issue an Order designating the time and place of hearing. Should the licensee fail to request a hearing within thirty days of the date of this Order, the provisions of this Order shall be effective without further proceedings and, if payment has not been made by that time, the matter may be referred to the Attorney General for collection.

In the event the licensee requests a hearing as provided above, the issues to be considered at such a hearing shall be:

- (a) whether the licensee was in violation of the Commission's requirements as set forth in the Notice of Violation and Proposed Imposition of Civil Penalties referenced in Section II above, and
- (b) whether on the basis of such violations this Order should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION



Richard C. DeYoung, Director
Office of Inspection and Enforcement

Dated at Bethesda, Maryland
this 14 day of October 1982

APPENDIX

EVALUATION AND CONCLUSIONS

Each item of noncompliance and associated civil penalty identified in the Notice of Violation (dated December 30, 1981), which was denied by the licensee, or for which mitigation was requested is restated below. The Office of Inspection and Enforcement's evaluation of the licensee's response is presented, followed by conclusions regarding the occurrence of the noncompliance and the proposed civil penalty.

Item I.A

STATEMENT OF NONCOMPLIANCE

Technical Specification 3.7.10 for Units 1 and 2 requires that all penetration fire barriers protecting safety related areas shall be functional at all times. With one or more of the above required penetration fire barriers non-functional, a continuous fire watch shall be established within one hour.

Technical Specification 4.7.10 for Units 1 and 2 states, in part, "Each of the above required penetration fire barriers shall be verified to be functional by a visual inspection...at least once per 18 months...."

Contrary to the above:

1. As of June 4, 1981, the licensee had not verified by visual inspection that certain penetration fire barriers (fire doors and fire dampers) protecting safety related areas were functional since the requirement became effective on January 12, 1978, for Unit 1 and on December 23, 1977, for Unit 2.
2. Eighteen fire doors protecting safety related areas (including the auxiliary feedwater pump rooms and containment cabling and piping penetration areas) were not functional for the following reasons:
 - a. Sixteen doors did not have the required fire rating.
 - b. Two fire doors were obstructed from closing.
 - c. Six fire doors had inoperable closure and/or latching mechanisms.
3. On June 4, 1981, when the NRC inspector informed licensee management that the visual inspections were overdue, the licensee failed to implement the provisions of the action statement of Technical Specification 3.7.10 and thereby satisfy the limiting condition for operation.

This is a Severity Level III violation (Supplement I).
(Civil Penalty - \$10,000).

EVALUATION OF LICENSEE'S RESPONSE

The licensee admitted that the facts are correct as stated in the Notice of Violation. The licensee contends that these facts do not represent a violation of Technical Specification 3/4.7.10 because the scope of that specification was narrowly interpreted by the licensee to include only piping and cabling penetration fire seals. The licensee provided a chronology of correspondence between the NRC staff and the licensee which preceded the issuance of Technical Specification 3/4.7.10 to support this position. Correspondence concerning the subject Technical Specification discusses only piping and cabling penetration seals. In response to this apparent violation, the licensee has committed to submit a request for a license amendment that would revise Technical Specification 3/4.7.10 to encompass all types of penetration fire barriers including fire doors and fire dampers, and pending that amendment to administratively apply Technical Specification 3/4.7.10 to these types of penetration fire barriers.

CONCLUSION

The information provided in the licensee's response does provide a basis for concluding that the scope of Technical Specification 3/4.7.10 could have been interpreted by the licensee to include only piping and cabling fire barrier penetration seals. Although the information in the licensee's response supports this interpretation, this interpretation represents poor fire protection engineering practice. The lack of any test or inspection program for fire doors resulted in undetected, nonfunctional fire doors which were intended to protect safety-related equipment. However, based on NRC's evaluation of the licensee's response, violation I.A will be retracted and the civil penalty for this violation will not be imposed.

Item I.BSTATEMENT OF NONCOMPLIANCE

Technical Specifications 3.3.3.7 for Unit 1 and 3.3.3.8 for Unit 2 state, in part, "As a minimum, the fire detection instrumentation for each fire detection zone... shall be OPERABLE.... With the number of OPERABLE fire detection instruments less than required.... Within one hour, establish a fire watch patrol to inspect the zone(s) with the inoperable instrument(s) at least once per hour...."

Technical Specifications 4.3.3.7.2 for Unit 1 and 4.3.3.8.2 for Unit 2 state, "The NFPA Code 72D Class B supervised circuits supervision associated with the detector alarms of each of the above required fire detection instruments shall be demonstrated OPERABLE at least once per six months."

Contrary to the above:

1. As of June 3, 1981, the fire detector supervisory circuits had not been demonstrated OPERABLE since the requirements became effective on January 12, 1978, for Unit 1, and on December 23, 1977, for Unit 2.
2. Four fire detector supervisory circuits were not OPERABLE due to malfunctioning relays. This resulted in a degraded mode of operation for the fire detection instrumentation for those four zones.
3. On June 4, 1981, when the NRC inspector informed licensee management that the OPERABILITY demonstrations were overdue, the licensee failed to implement the provisions of the action statement of Technical Specification 3.3.3.7 for Unit 1 and 3.3.3.8 for Unit 2 and thereby satisfy the limiting condition for operation.

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

(Civil Penalty - \$5,000).

EVALUATION OF LICENSEE'S RESPONSE

The licensee admitted that the facts are correct as stated in the Notice of Violation. The licensee's response to violation I.B has provided no new information regarding the circumstances surrounding this violation, but has focused on the definition of fire detector "operability." The licensee contends that the fire detection instrumentation technical specification was not violated by having fire detection supervisory circuits inoperable. The fire detection instrumentation technical specification requires a minimum number of detectors to be operable in each detection zone. The inoperable supervisory circuits did not affect the ability of the detection instrumentation to function properly. Consequently, under the definition of operability, the supervisory circuitry is not necessary attendant equipment which must be able to perform its function for the detection instrumentation to perform its function.

CONCLUSION

The NRC Staff accepts the licensee's position. Sections 2 and 3 of this violation will be retracted and the Severity Level will be reduced from III to IV. Since violation I.A has been retracted in its entirety and the severity level of violation I.B has been reduced, the civil penalty for violation I.B will not be imposed.

Item I.C

STATEMENT OF NONCOMPLIANCE

Technical Specification 3.7.9.2 for Units 1 and 2 states, in part, the spray and/or sprinkler systems located in the areas shown in Table 3.7-5 shall be OPERABLE.... Whenever equipment in the spray/sprinkler protected areas is required to be OPERABLE...with one or more of the above required spray and/or sprinkler systems inoperable, establish a continuous fire watch with backup fire suppression equipment for the unprotected area(s); within one hour...."

Technical Specification 4.7.9.2 for Units 1 and 2 states, in part, that each of the above required spray and/or sprinkler systems shall be demonstrated to be OPERABLE at intervals of 12 months and 18 months, in accordance with specified test requirements.

Contrary to the above, until January 3, 1980, the spray and sprinkler systems listed in Technical Specification Table 3.7-5 had not been demonstrated OPERABLE since the requirement became effective on January 12, 1978, for Unit 1 and on December 23, 1977, for Unit 2.

This is an Infraction.
(Civil Penalty - \$4,000).

EVALUATION OF LICENSEE'S RESPONSE

The licensee admitted that the facts are correct as stated in the Notice of Violation. The licensee has provided no new information regarding the basis for or circumstances surrounding this violation. The licensee stated the civil penalty should be retracted because the violation was identified by the licensee and corrective action was promptly initiated.

This violation was identified during an internal audit on December 3-6, 1979, and formally documented in a Corrective Action Request on January 3, 1980. Temporary procedure changes were not written to correct the violation until January 29, 1980, for the charcoal filter protection systems and February 2, 1980, for the auxiliary building protection systems. The surveillance testing of these systems was not completed until February 6, 1980 and March 3, 1980, respectively. The long time period before corrective action was taken (without compensatory and remedial action) is indicative of inadequate licensee management attention to this fire protection violation as well as inadequate management control over the fire protection equipment surveillance program.

CONCLUSION

The violation as described above did occur as originally stated. Since violation I.A has been retracted in its entirety and the severity level of violation I.B has been reduced, the civil penalty for violation I.C will not be imposed.

Item I.F

STATEMENT OF NONCOMPLIANCE

Technical Specification 6.8.1.e for Units 1 and 2 requires that written procedures shall be established, implemented and maintained covering the Emergency Plan implementation.

The Donald C. Cook Emergency Plan which is contained in Section 12.3.1 of the Final Safety Analysis Report was amended in December 1977 (Amendment No. 80) to include a requirement in Part IX.F.4 that fire brigade members participate in quarterly fire drills.

Contrary to the above, written procedures were not established to implement this requirement. Consequently, the requirement was not satisfied on four occasions as follows:

1. The Operating Shift A Fire Brigade did not participate in a fire drill in the second quarter of 1979.
2. The Operating Shift C Fire Brigade did not participate in a fire drill in the third quarter of 1979.
3. The Operating Shift B Fire Brigade did not participate in a fire drill in the third quarter of 1980.
4. The Operating Shift D Fire Brigade did not participate in a fire drill in the fourth quarter of 1980.

This is a Severity Level IV violation (Supplement I).
(Civil Penalty - \$2,500).

EVALUATION OF LICENSEE'S RESPONSE

The licensee's response to violation I.F has provided new information regarding the circumstances surrounding this violation. The licensee indicates that two of the apparently missed fire drills are documented in the operations logbook. The remaining two apparently missed fire drills cannot be documented. The licensee admits that no formal procedure to hold fire drills existed from December 1977 until January 1979. The licensee contends that after January 1979, an Operations Standing Order (OSO-24) on the subject of fire drills,

written by the Operations Superintendent, constituted a formal administrative plant procedure and satisfied the Technical Specification requirements. This standing order was implemented following an internal audit of the fire protection program which had previously identified this violation.

An Operations Standing Order does not constitute a formal procedure in content, documentation or review and approval as required by Technical Specification 6.8.1.e. The licensee has demonstrated that two of the apparently missed fire drills can be documented through the operations logbook. However, failure to have an appropriate procedure shows that licensee management implemented inadequate corrective action after an internal audit identified this violation two and one-half years before this inspection.

CONCLUSION

The NRC accepts the statements made in the licensee's response concerning documentation of two of the four apparently missed fire drills and retracts parts 1 and 4 of this violation. Since violation I.A has been retracted in its entirety and the severity level of violation I.B has been reduced, the civil penalty for the remainder of violation I.F will not be imposed.

Items I.G and I.H

STATEMENT OF NONCOMPLIANCE

I.G

As part of the NRC staff review of fire protection at the D. C. Cook Nuclear Plant, Units 1 and 2, the staff requested, by letter dated September 30, 1976, that the licensee prepare a fire hazards analysis of the facility. The licensee's response dated March 31, 1977, "Fire Hazards Analysis Units 1 and 2," stated that ten specified fire zones were provided with 12 (Underwriters' Laboratories approved) Class B doors.

Contrary to section 186 of the Atomic Energy Act of 1954, the statement in the licensee's March 31, 1977 response is a material false statement. It is false in that none of the 12 specified doors had any fire resistance rating. This false statement is material, in that the staff relied upon it in reaching its conclusions regarding the acceptability of the licensee's fire protection program.

(Civil Penalty - \$4,000)

I.H

The NRC staff requested by letter dated July 11, 1977, that the licensee provide information concerning unprotected openings in the auxiliary feedwater pump rooms. The licensee's response dated November 22, 1977, stated, in part, "The four feedwater pump rooms are equipped with (Underwriter's Laboratories approved) three hour rated fire doors...."

Contrary to section 186 of the Atomic Energy Act of 1954, the statement in the licensee's November 22, 1977 response is a material false statement. It is false, in that it was determined that none of these doors had a fire resistance rating. This false statement is material, in that the staff relied upon it in reaching its conclusions regarding the acceptability of the licensee's fire protection program.

(Civil Penalty - \$4,000)

EVALUATION OF LICENSEE RESPONSE

The licensee admitted that the facts are generally correct as stated in the Notice of Violation. The licensee's response to violations I.G and I.H has provided no new information regarding the basis for or the circumstances surrounding these violations. The licensee's basis for mitigation of the civil penalty has also provided no new information regarding the criteria for imposition of a civil penalty for these violations. The licensee asserts that a civil penalty is not appropriate for these violations because they occurred in the same time frame as material false statements previously cited by the NRC and for which adequate corrective actions had been taken.

The accuracy of information provided to the NRC is of utmost importance when that information is utilized to make determinations on the adequacy of facility design to protect public health and safety. Inaccurate information could result in decisions which adversely affect the health and safety of the public. The inaccurate information cited in violations I.G and I.H concerning the capability of certain doors in the facility to resist fire propagation misrepresented the fire containment design feature of the facility fire protection program. While these violations occurred during the time frame of previous enforcement action concerning other material false statements, that enforcement action does not relieve the licensee from the responsibility for providing accurate information to the NRC, nor does it relieve the licensee from liability for other material false statements.

CONCLUSION

These violations did occur as originally stated. The information provided in the licensee's response does not provide a basis for modification of the enforcement action.

Item I.I

STATEMENT OF NONCOMPLIANCE

The NRC staff requested by letters dated July 16 and 30, 1976, that the licensee make a comparison of the D. C. Cook Nuclear Plant fire protection program with the positions in Appendix A to Branch Technical Position APCSB 9.5-1, "Guidelines for Fire Protection for Nuclear Power Plants Docketed Prior to July 1, 1976." One of the positions in Appendix A states, in part, "Effective administrative measures should be implemented to prohibit bulk storage of combustible

materials inside or adjacent to safety related buildings or systems during operation or maintenance periods ..." The licensee's response dated January 31, 1977, states, in part, "Administrative measures have been established to control the storage of combustible materials and to prohibit their storage in the vicinity of safety related systems."

Contrary to section 186 of the Atomic Energy Act of 1954, the statement in the licensee's January 31, 1977 response is a material false statement. It is false, in that it was determined during an NRC inspection that administrative measures had not been established at the time of the licensee's January 31, 1977 response and they were not established until July 28, 1977. This false statement is material, in that staff relied upon it in reaching its conclusions regarding the acceptability of the licensee's fire protection program.

(Civil Penalty - \$4,000).

EVALUATION OF LICENSEE'S RESPONSE

The licensee's response to violation I.I has provided no new information regarding the basis for or circumstances surrounding this violation or civil penalty. The licensee contends that Plant Manager Instruction PMI-2090, Revision 1, implements administrative measures "to control the storage of combustible materials and to prohibit their storage in the vicinity of safety related systems" through a requirement that "Inspections of completed work by first line supervisors shall also include...removal of fire hazards and proper disposal of...oily rags." This contention extends the scope of this procedure beyond the instructions contained in the procedure. This procedure addresses the mechanism to control fire hazards resulting from a work activity. PMI-2090, Revision 1, did not control the general storage of combustible materials nor prohibit their storage in the vicinity of safety-related systems when the statement was made.

CONCLUSION

This violation as described above did occur as originally stated. The information provided in the licensee's response does not provide a basis for modification of the enforcement action.

Item II.A

STATEMENT OF NONCOMPLIANCE

Technical Specification 3.6.1.1 requires that primary containment integrity be maintained during power operation, startup, hot standby and hot shutdown (modes 1, 2, 3 and 4). If primary containment integrity is lost, it is required to be restored within one hour or the plant be placed in at least hot standby within the next six hours and in cold shutdown within the following 30 hours.

Contrary to the above, primary containment integrity was not maintained from about 10:45 a.m. on May 10, 1981, to 10:30 p.m. on May 12, 1981, (a period of about 60 hours) while the Unit 2 reactor was in hot standby and hot shutdown (modes 3 and 4) in that a containment sensing line plug, removed to install a test instrument, was not replaced following completion of the Integrated Leak Rate Test. The calculated leakage rate from the sensing line with the plug removed exceeded the limits allowed by the Technical Specification.

This is a Severity Level III violation (Supplement I).
(Civil Penalty - \$30,000).

EVALUATION OF LICENSEE'S RESPONSE

The licensee's response admitted that the facts were correct as stated.

The licensee's contention for requesting mitigation of the civil penalty are: (1) the subject event was not similar to the event discussed during the January 13, 1981 Enforcement Conference; (2) the procedure was not inadequate since its purpose was to assure validity of the type A test required by 10 CFR 50, Appendix J; and (3) the corrective actions were taken promptly and additional control measures were promptly implemented.

The licensee contends that there is no basis for escalating the enforcement action by 25% because this event was not similar to prior violations. The civil penalty base amount for this violation was not increased based upon similarity.

The licensee's second contention is that the procedure was not supposed to assure restoration, only to conduct a successful leak rate test, and that "a technician overlooked sound maintenance practices."

Technical Specification 6.8.1, though not specifically cited, requires that procedures be established to ensure proper conduct of surveillance and test activities of safety-related equipment. To suggest that it is acceptable to rely merely on maintenance practices to ensure that containment integrity is maintained is an unacceptable premise.

The third contention for requesting mitigation of the civil penalty is that prompt corrective actions were taken.

Although it is agreed that the plug was promptly replaced when it was discovered missing, the corrective actions taken to prevent a similar occurrence were not implemented until about two months after the event (procedures dated July 9, 24, and 28, 1981).

CONCLUSION

As admitted by the licensee, the violation of Technical Specification 3.6.1.1 described above occurred as originally stated. The information provided in the licensee's response does not provide a basis for modification of the enforcement action.

Item II.BSTATEMENT OF NONCOMPLIANCE

Technical Specification 6.9.1.8 requires that NRC be notified of certain events within 24 hours by telephone and with a written followup report within 14 days. One event that requires reporting within 24 hours is: "Personnel error or procedural inadequacy which prevents, or could prevent, by itself, the fulfillment of the functional requirements of systems required to cope with accidents analyzed in the SAR."

10 CFR 50.72 requires the notification of the NRC Operations Center as soon as possible and in all cases within one hour by telephone of the occurrence of "Personnel error or procedural inadequacy which, during normal operations, anticipated operational occurrences, or accident conditions, prevents or could prevent, by itself, the fulfillment of the safety function of those structures, systems, and components important to safety that are needed to (i) shut down the reactor safely and maintain it in a safe shutdown condition, or (ii) remove residual heat following reactor shutdown, or (iii) limit the release of radioactive material to acceptable levels or reduce the potential for such release."

Contrary to the above, telephone notification was not made of the event described above in Item II.A and a written report was not submitted within 14 days. The event was identified by the licensee on May 12, 1981, but was not reported to the NRC until July 15, 1981.

This is a Severity Level III violation (Supplement I).
(Civil Penalty - \$10,000).

EVALUATION OF LICENSEE'S RESPONSE

The licensee points out that the violation is partially incorrect in stating that the event was not reported until July 15, 1981. The licensee is correct. The July 15, 1981 date was the date of the revised event report which was originally submitted as a 30-day report on June 10, 1981.

The basis the licensee sets forth for requesting retraction of the civil penalty is that the issue is not a failure to report but a case of misclassifying the reportability of an event and submitting an untimely report. As noted in the NRC's December 30, 1981 letter transmitting the Notice of Violation and Proposed Imposition of Civil Penalties, the failure to notify the NRC in a timely manner is the basis for this item of noncompliance.

The licensee also states that the significance of this event did not warrant immediate reporting to the NRC, and that the applicability of this reporting requirement was not considered by the NRC in its initial evaluation. When the NRC Senior Resident Inspector became aware of this event, he presented his position to plant management that it was an ENS reportable event and required

prompt notification. After three-and-a-half weeks of consideration, the licensee decided to report it "promptly" (24-hour report). 10 CFR 50.72 is applicable to personnel errors which could prevent the function of the containment (limit release of radioactive material).

CONCLUSION

The violation of Technical Specification 6.9.1.8 and 10 CFR 50.72 did occur as stated except that the date "June 10, 1981" should be substituted for "July 15, 1981" as the date the licensee initially reported the event to NRC. The information provided in the licensee's response does not provide a basis for modification of the enforcement action.

Item III.B

STATEMENT OF NONCOMPLIANCE

Technical Specification 6.5.1.6 requires that the Plant Nuclear Safety Review Committee (PNSRC) be responsible for review of all procedures required by Technical Specification 6.8 and changes thereto. Technical Specification 6.8 includes requirements to have surveillance test procedures.

Contrary to the above, Surveillance Test Procedure 12THP4030 STP.202, Revision 3, was changed in that the isolation valves for containment pressure transmitters PPA-310 and PPA-311, which were not addressed in the procedure, were closed during the Integrated Leak Rate Test without review by the PNSRC.

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

EVALUATION OF LICENSEE'S RESPONSE

The licensee states that its position is essentially that the positioning of the containment pressure-sensing-line valves was not specified in the procedure since their positions have no bearing on the validity of the Type A leak measurement. Therefore, any change in alignment did not require review in accordance with Technical Specification 6.5.1.6.

Since the integrated leak rate test procedures do not specify whether the transmitters and associated sensing lines should be valved out, it must be assumed that these components remain in their normal operating position.

Instruments should not be isolated from the testable volume on a Type A test as discussed in 10 CFR 50 Appendix J. The instrument and associated sensing lines are considered to be an extension of containment.

CONCLUSION

The violation of Technical Specification 6.5.1.6 did occur as originally stated. The information provided in the licensee's response does not provide a basis for modification of the enforcement action.

