

DISTRIBUTION

- Docket File
- NRC PDR
- Local PDR
- ORB 1 File
- D. Eisenhut
- OELD
- SECY (w/trans form)
- L. J. Harmon
- E. L. Jones
- J. M. Taylor
- T. Barnhart (2)
- L. Schneider
- D. Brinkman
- ACRS (10)
- MPA (Clare Miles)
- R. Ferguson
- R. Diggs
- NSIC
- ASLAB

December 8, 1982

Docket Nos. 50-315
and 50-316

Mr. John Dolan, Vice President
Indiana and Michigan Electric Company
Post Office Box 18
Bowling Green Station
New York, New York 10004

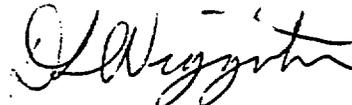
Dear Mr. Dolan:

The Commission has issued the enclosed Amendment No. 66 to Facility Operating License No. DPR-58 and Amendment No. 47 to Facility Operating License No. DPR-74 for the D. C. Cook, Unit Nos. 1 and 2, respectively. The amendments consist of changes to the Technical Specifications in response to your application transmitted by letter dated August 30, 1982, as supplemented by letters dated October 29, 1982 and November 19, 1982.

These amendments revise the Technical Specifications to allow containment purging during operation and to allow purge and vent modifications required as part of the TMI Action Plan.

Copies of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,



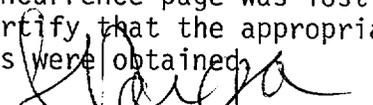
David Wigginton, Project Manager
Operating Reactors Branch No. 1
Division of Licensing

Enclosures:

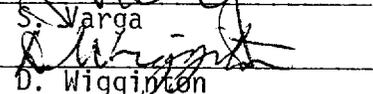
1. Amendment No. 66 to DPR-58
2. Amendment No. 47 to DPR-74
3. Safety Evaluation
4. Notice of Issuance

cc w/enclosures:
See next page

*Previous concurrence page was lost.
I hereby certify that the appropriate concurrences were obtained.



S. Varga



D. Wigginton

8301030281 821208
PDR ADOCK 05000315
PDR

| | | | | | | | |
|---------|------------------|------------------------|-------------------|---------------------|----------|--|--|
| OFFICE | ORB 1 Parrish | ORB 1 DWigginton/rs | ORB 1 S. Varga | AD:OR:DL GLainas | * OELD * | | |
| SURNAME | | | | | | | |
| DATE | 12/8/82 | 12/8/82 | 12/16/82 | 12/ /82 | 12/ /82 | | |

Mr. John Dolan
Indiana and Michigan Electric Company

cc: Mr. M. P. Alexich
Assistant Vice President
for Nuclear Engineering
American Electric Power
Service Corporation
2 Broadway
New York, New York 10004

Mr. William R. Rustem (2)
Office of the Governor
Room 1 - Capitol Building
Lansing, Michigan 48913

Mr. Wade Schuler, Supervisor
Lake Township
Baroda, Michigan 49101

W. G. Smith, Jr., Plant Manager
Donald C. Cook Nuclear Plant
P. O. Box 458
Bridgman, Michigan 49106

U. S. Nuclear Regulatory Commission
Resident Inspectors Office
7700 Red Arrow Highway
Stevensville, Michigan 49127

Honorable James Bemnek, Mayor
City of Bridgman, Michigan 49106

U.S. Environmental Protection Agency
Region V Office
ATTN: EIS COORDINATOR
230 South Dearborn Street
Chicago, Illinois 60604

Maurice S. Reizen, M.D.
Director
Department of Public Health
P.O. Box 30035
Lansing, Michigan 48109

William J. Scanlon, Esquire
2034 Pauline Boulevard
Ann Arbor, Michigan 48103

The Honorable Tom Corcoran
United States House of Representatives
Washington, D. C. 20515

James G. Keppler
Regional Administrator - Region III
U. S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137



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

INDIANA AND MICHIGAN ELECTRIC COMPANY

DOCKET NO. 50-315

D. C. COOK UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 66
License No. DPR-58

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Indiana and Michigan Electric Company (the licensee) dated August 30, 1982, as supplemented by letters dated October 29, 1982 and November 19, 1982, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public;
and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

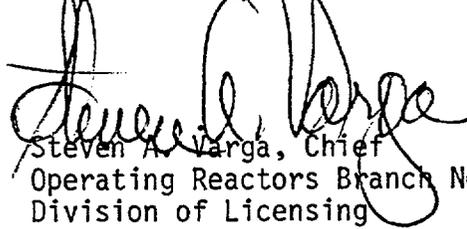
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-58 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 66, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Steven A. Varga, Chief
Operating Reactors Branch No. 1
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 8, 1982



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

INDIANA AND MICHIGAN ELECTRIC COMPANY

DOCKET NO. 50-316

D. C. COOK UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 47
License No. DPR-74

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Indiana and Michigan Electric Company (the licensee) dated August 30, 1982, as supplemented by letters dated October 29, 1982 and November 19, 1982, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

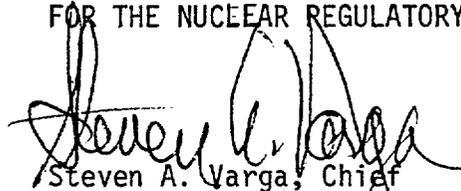
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-74 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 47, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Steven A. Varga, Chief
Operating Reactors Branch No. 1
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 8, 1982

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 66 TO FACILITY OPERATING LICENSE NO. DPR-58

AMENDMENT NO. 47 TO FACILITY OPERATING LICENSE NO. DPR-74

DOCKET NOS. 50-315 AND 50-316

Revise Appendix A as follows:

| | <u>Remove Pages</u> | <u>Insert Pages</u> |
|---------------|---------------------|---------------------|
| <u>Unit 1</u> | | |
| | 3/4 6-14 | 3/4 6-14 |
| | 3/4 6-20 | 3/4 6-20 |
| | 3/4 6-21 | 3/4 6-21 |
| | 3/4 6-22 | 3/4 6-22 |
| | - | 3/4 6-9a |
| | - | B 3/4 6-2a |
| | | |
| <u>Unit 2</u> | | |
| | 3/4 6-13 | 3/4 6-13 |
| | 3/4 6-25 | 3/4 6-25 |
| | 3/4 6-26 | 3/4 6-26 |
| | 3/4 6-32 | 3/4 6-32 |
| | - | 3/4 6-9a |
| | - | B 3/4 6-2a |
| | 3/4 9-9 | 3/4 9-9 |

CONTAINMENT SYSTEMS

3/4.6.3 CONTAINMENT ISOLATION VALVES

LIMITING CONDITION FOR OPERATION

3.6.3.1 The containment isolation valves specified in Table 3.6-1 shall be OPERABLE with isolation times as shown in Table 3.6-1. The ACTION statement of T/S 3/4.6.3 is not applicable to the containment purge supply and exhaust isolation valves, VCR-101 through 106 and VCR-201 through 206, listed in Table 3.6-1. The Limiting Condition for Operation and its associated ACTION statement for these valves is given in Technical Specification 3/4.6.1.7.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one or more of the isolation valve(s) specified in Table 3.6-1 inoperable, either:

- a. Restore the inoperable valve(s) to OPERABLE status within 4 hours, or
- b. Isolate each affected penetration within 4 hours by use of at least one deactivated automatic valve secured in the isolation position, or
- c. Isolate each affected penetration within 4 hours by use of at least one closed manual valve or blind flange, or
- d. Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.3.1.1 The isolation valves specified in Table 3.6-1 shall be demonstrated OPERABLE:

- a. At least once per 92 days by cycling each OPERABLE power operated or automatic valve testable during plant operation through at least one complete cycle of full travel.
- b. Immediately prior to returning the valve to service after maintenance, repair or replacement work is performed on the

TABLE 3.6-1 (Continued)

| <u>VALVE NUMBER</u> | <u>FUNCTION</u> | <u>TESTABLE DURING PLANT OPERATION</u> | <u>ISOLATION TIME IN SECONDS</u> |
|--------------------------------------------|---------------------------------------|--------------------------------------------|--------------------------------------|
| B. PHASE "B" ISOLATION (Continued) | | | |
| 44. WCR-961 | NESW to Instr. Rm. East Vent | Yes | 10 |
| 45. WCR-963 | NESW from Instr. Rm. West Vent | Yes | 10 |
| 46. WCR-965 | NESW to Instr. Rm. East Vent | Yes | 10 |
| 47. WCR-967 | NESW from Instr. Rm. West Vent | Yes | 10 |
| 48. WCR-900 | NESW to RCP Lower Containment Vent #1 | Yes | 10 |
| 49. WCR-902 | NESW from Lower Containment Vent #1 | Yes | 10 |
| 50. WCR-904 | NESW to RCP Lower Containment Vent #2 | Yes | 10 |
| 51. WCR-906 | NESW from Lower Containment Vent #2 | Yes | 10 |
| 52. WCR-908 | NESW to RCP Lower Containment Vent #3 | Yes | 10 |
| 53. WCR-910 | NESW from Lower Containment Vent #3 | Yes | 10 |
| 54. WCR-912 | NESW to RCP Lower Containment Vent #4 | Yes | 10 |
| 55. WCR-914 | NESW from Lower Containment Vent #4 | Yes | 10 |
| 56. WCR-920 | NESW to RCP Upper Containment Vent #1 | Yes | 10 |
| 57. WCR-922 | NESW from Upper Containment Vent #1 | Yes | 10 |
| 58. WCR-924 | NESW to RCP Upper Containment Vent #2 | Yes | 10 |
| 59. WCR-926 | NESW from Upper Containment Vent #2 | Yes | 10 |
| 60. WCR-928 | NESW to RCP Upper Containment Vent #3 | Yes | 10 |
| 61. WCR-930 | NESW from Upper Containment Vent #3 | Yes | 10 |
| 62. WCR-932 | NESW to RCP Upper Containment Vent #4 | Yes | 10 |
| 63. WCR-934 | NESW from Upper Containment Vent #4 | Yes | 10 |
| 64. WCR-960 | NESW to Instrument Room East Vent | Yes | 10 |
| 65. WCR-962 | NESW from Instrument Room East Vent | Yes | 10 |
| 66. WCR-964 | NESW to Instrument Room West Vent | Yes | 10 |
| 67. WCR-966 | NESW from Instrument Room West Vent | Yes | 10 |
| C. CONTAINMENT PURGE AND EXHAUST ** | | | |
| 1. VCR-101 | Instr. Room Purge Air Inlet | Yes | 5 |
| 2. VCR-102 | Instr. Room Purge Air Outlet | Yes | 5 |
| 3. VCR-103 | Lower Comp. Purge Air Inlet | Yes | 5 |
| 4. VCR-104 | Lower Comp. Purge Air Outlet | Yes | 5 |
| 5. VCR-105 | Upper Comp. Purge Air Inlet | Yes | 5 |
| 6. VCR-106 | Upper Comp. Purge Air Outlet | Yes | 5 |
| 7. VCR-107* | Cont. Press. Relief Fan Isolation | Yes | 5 |
| 8. VCR-201 | Instr. Room Purge Air Inlet | Yes | 5 |
| 9. VCR-202 | Instr. Room Purge Air Outlet | Yes | 5 |
| 10. VCR-203 | Lower Comp. Purge Air Inlet | Yes | 5 |
| 11. VCR-204 | Lower Comp. Purge Air Outlet | Yes | 5 |

D. C. COOK-UNIT 1

3/4 6-20

Amendment No. 66

TABLE 3.6-1 (Continued)

| <u>VALVE NUMBER</u> | <u>FUNCTION</u> | <u>TESTABLE DURING PLANT OPERATION</u> | <u>ISOLATION TIME IN SECONDS</u> |
|----------------------------------------------------|-----------------------------------------------|--------------------------------------------|--------------------------------------|
| <u>C. CONTAINMENT PURGE EXHAUST (Continued) **</u> | | | |
| 12. VCR-205 | Upper Comp. Purge Air Inlet | Yes | 5 |
| 13. VCR-206 | Upper Comp. Purge Air Outlet | Yes | 5 |
| 14. VCR-207* | Cont. Press Relief Fan Isolation | Yes | 5 |
| <u>D. MANUAL ISOLATION VALVES (1)</u> | | | |
| 1. ICM-111 | RHR to RC Cold Legs | Yes | NA |
| 2. ICM-129 | RHR Inlet to Pumps | No | NA |
| 3. ICM-250 | Boron Injection Inlet | Yes | NA |
| 4. ICM-251 | Boron Injection Inlet | Yes | NA |
| 5. ICM-260 | Safety Injection Inlet | Yes | NA |
| 6. ICM-265 | Safety Injection Inlet | Yes | NA |
| 7. ICM-305 | RHR Suction from Sump | Yes | NA |
| 8. ICM-306 | RHR Suction from Sump | Yes | NA |
| 9. ICM-311 | RHR to RC Hot Legs | Yes | NA |
| 10. ICM-321 | RHR to RC Hot Legs | Yes | NA |
| 11. NPX 151 VI | Dead Weight Tester | Yes | NA |
| 12. PA 145 | Containment Service Air | No | NA |
| 13. SF-151 | Refueling Water Supply | Yes | NA |
| 14. SF-153 | Refueling Water Supply | Yes | NA |
| 15. SF-159 | Refueling Cavity Drain to Purification System | Yes | NA |
| 16. SF-160 | Refueling Cavity Drain to Purification System | Yes | NA |
| 17. SI-171 | Safety Injection Test Line | Yes | NA |
| 18. SI-172 | Accumulator Test Line | Yes | NA |

TABLE 3.6-1 (Continued)

| <u>VALVE NUMBER</u> | <u>FUNCTION</u> | <u>TESTABLE DURING PLANT OPERATION</u> | <u>ISOLATION TIME IN SECONDS</u> | |
|---------------------------------------------------|-----------------|-----------------------------------------|----------------------------------|----|
| <u>D. MANUAL ISOLATION VALVES (1) (Continued)</u> | | | | |
| 19. | CCR-440 | CCW from Main Steam Penetration | Yes | NA |
| 20. | CCR-441 | CCW from Main Steam Penetration | Yes | NA |
| 21. | MCM-221 | Main Steam to Auxiliary Feed Pump | No | NA |
| 22. | MCM-231 | Main Steam to Auxiliary Feed Pump | No | NA |
| 23. | CCM-430 | CCW to East Pressure Equalization Fan | Yes | NA |
| 24. | CCM-431 | CCW from East Pressure Equalization Fan | Yes | NA |
| 25. | CCM-432 | CCW to West Pressure Equalization Fan | Yes | NA |
| 26. | CCM-433 | CCW from West Pressure Equalization Fan | Yes | NA |
| 27. | SM-8* | Upper Containment Sample | Yes | NA |
| 28. | SM-10* | Upper Containment Sample | Yes | NA |
| 29. | SM-4* | Instrument Room Sample | Yes | NA |
| 30. | SM-6* | Instrument Room Sample | Yes | NA |

NA - Manual Valve-Isolation time not applicable.

(1) - Includes motor operated valves which do not isolate automatically.

* - May be opened on an intermittent basis under administrative control.

** - Containment purge supply and exhaust isolation valves (VCR-101 through 106 and VCR-201 through 206) may be opened under Technical Specification 3/4.6.1.7.

CONTAINMENT SYSTEMS

CONTAINMENT VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.1.7 The containment purge supply and exhaust isolation valves shall be closed except when operation of the containment purge system is required for safety related reasons. No more than one purge supply path and one purge exhaust path shall be open at a time.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

- a. With one containment purge supply and/or one exhaust isolation valve inoperable, isolate the affected penetration by use of at least one automatic valve secured in the closed position, and, within 72 hours, either:
 - 1) Restore the inoperable valve to OPERABLE status, or,
 - 2) Deactivate the automatic valve secured in the closed position.
- b. Operation may then continue until performance of the next required valve test provided that the automatic valve secured in the closed position is verified to be deactivated in the closed position at least once per 31 days.
- c. Otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- d. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.6.1.7.1 The surveillance requirements of Technical Specification 3/4.6.3.1 apply.

CONTAINMENT SYSTEMS

BASES

3/4.6.1.7 CONTAINMENT PURGE AND EXHAUST ISOLATION VALVES

This specification ensures that the containment purge supply and exhaust isolation valves are closed for the majority of the time during normal operation. It allows for containment purging for safety related reasons.* Safety-related reasons are meant to be the need to improve containment working conditions, e.g. reduce airborne activity, to perform surveillance and/or maintenance on a safety-related system or piece of equipment. The purge/vent system shall not be used to control containment atmosphere temperature and humidity. It is intended that purging and venting times will be as short as possible. Allowing purge operations in Modes 1, 2, 3, and 4 is more beneficial than a cooldown to Mode 5 from the standpoint of (a) imposing unnecessary thermal stress cycles on the reactor coolant system and its components and (b) reducing the potential for causing unnecessary challenges to the reactor trip and safeguards systems. The containment purge system is designed in accordance with the requirements of NRC Branch Technical Position CSB 6-4, Rev. 1. This includes, but is not limited to, an analysis of the impact of purging on ECCS performance, an evaluation of the radiological consequences of a design basis accident while purging, and limiting purge operation to using no more than one supply path and one exhaust path at a time. The purge isolation valves have been demonstrated capable of closing against the dynamic forces associated with a loss-of-coolant accident and are assured of receiving a Containment Ventilation Isolation signal. Reset switches have been protected against inadvertent use in a manner which facilitates the administrative controls governing their use. The use of the pressure relief (vent) line is allowed for containment pressure control. The purge and vent isolation valves do not use resilient seating/sealing material and are not subject to the type of environmental degradation common to resilient materials.

*The D. C. Cook purge estimate goal is two hundred (200) hours each year for each unit. This purge estimate is based on a plant capacity factor of 77%, and accounts for two purge operations per week. Each purge operation is assumed to be approximately 2 1/2 hours in duration. The annual 200-hour purge operation time limit amounts to less than 3% of the estimated plant operation time in Modes 1 through 4.

CONTAINMENT SYSTEMS

3/4.6.3 CONTAINMENT ISOLATION VALVES

LIMITING CONDITION FOR OPERATION

3.6.3.1 The containment isolation valves specified in Table 3.6-1 shall be OPERABLE with isolation times as shown in Table 3.6-1. The ACTION statement of Technical Specification 3/4.6.3 is not applicable to the containment purge and exhaust isolation valves, VCR-101 through 106 and VCR-201 through 206, listed in Table 3.6-1. The Limiting Condition for Operation and its associated ACTION statement for these valves is given in Technical Specification 3/4.6.1.7.

APPLICABILITY: Modes 1, 2, 3 and 4.

ACTION:

With one or more of the isolation valves(s) specified in Table 3.6-1 inoperable, maintain at least one isolation valve OPERABLE in each affected penetration that is open and either:

- a. Restore the inoperable valve(s) to OPERABLE status within 4 hours, or
- b. Isolate each affected penetration within 4 hours by use of at least one deactivated automatic valve secured in the isolation position, or
- c. Isolate each affected penetration within 4 hours by use of at least one closed manual valve or blind flange; or
- d. Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.3.1.1 The isolation valves specified in Table 3.6-1 shall be demonstrated OPERABLE prior to returning the valve to service after maintenance, repair or replacement work is performed on the valve or its associated actuator, control or power circuit by performance of a cycling test and verification of isolation time.

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

| <u>VALVE NUMBER</u> | <u>FUNCTION</u> | <u>ISOLATION TIME IN SECOND</u> |
|--------------------------------------------|---------------------------------------|-------------------------------------|
| <u>B. PHASE "B" ISOLATION (Continued)</u> | | |
| 56. WCR-920 | NESW to RCP Upper Containment Vent #1 | ≤10 |
| 57. WCR-922 | NESW from Upper Containment Vent #1 | ≤10 |
| 58. WCR-924 | NESW to RCP Upper Containment Vent #2 | ≤10 |
| 59. WCR-926 | NESW from Upper Containment Vent #2 | ≤10 |
| 60. WCR-928 | NESW to RCP Upper Containment Vent #3 | ≤10 |
| 61. WCR-930 | NESW from Upper Containment Vent #3 | ≤10 |
| 62. WCR-932 | NESW to RCP Upper Containment Vent #4 | ≤10 |
| 63. WCR-934 | NESW from Upper Containment Vent #4 | ≤10 |
| 64. WCR-960 | NESW to Instrument Room East Vent | ≤10 |
| 65. WCR-962 | NESW from Instrument Room East Vent | ≤10 |
| 66. WCR-964 | NESW to Instrument Room West Vent | ≤10 |
| 67. WCR-966 | NESW from Instrument Room West Vent | ≤10 |
| <u>C. CONTAINMENT PURGE AND EXHAUST **</u> | | |
| 1. VCR-101 | Instr. Room Purge Air Inlet | ≤5 |
| 2. VCR-102 | Instr. Room Purge Air Outlet | ≤5 |
| 3. VCR-103 | Lower Comp. Purge Air Inlet | ≤5 |
| 4. VCR-104 | Lower Comp. Purge Air Outlet | ≤5 |
| 5. VCR-105 | Upper Comp. Purge Air Inlet | ≤5 |

TABLE 3.6-1 (Continued)
CONTAINMENT ISOLATION VALVES

| <u>VALVE NUMBER</u> | <u>FUNCTION</u> | <u>ISOLATION TIME IN SECONDS</u> |
|--------------------------------------------------------|-----------------------------------|--------------------------------------|
| <u>C. CONTAINMENT PURGE AND EXHAUST (Continued) **</u> | | |
| 6. VCR-106 | Upper Comp. Purge Air Outlet | ≤ 5 |
| 7. VCR-107* | Cont. Press. Relief Fan Isolation | ≤ 5 |
| 8. VCR-201 | Instr. Room Purge Air Inlet | ≤ 5 |
| 9. VCR-202 | Instr. Room Purge Air Outlet | ≤ 5 |
| 10. VCR-203 | Lower Comp. Purge Air Inlet | ≤ 5 |
| 11. VCR-204 | Lower Comp. Purge Air Outlet | ≤ 5 |
| 12. VCR-205 | Upper Comp. Purge Air Outlet | ≤ 5 |
| 13. VCR-206 | Upper Comp. Purge Air Outlet | ≤ 5 |
| 14. VCR-207* | Cont. Press Relief Fan Isolation | ≤ 5 |
| <u>D. MANUAL ISOLATION VALVES (1)</u> | | |
| 1. 1CM-111# | RIIR to RC Cold Legs | NA |
| 2. 1CM-129 | RIIR Inlet to Pumps | NA |

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

TABLE NOTATION

- * May be opened on an intermittent basis under administrative control.
- # Not subject to Type "B" or "C" Leak Tests.
- NA Check valves, blind flanges on normally closed valves which do not receive containment isolation signals; isolation time not applicable.
- (1) Includes motor operated valves which do not isolate automatically.
- ** Containment purge supply and exhaust isolation valves (VCR-101 through 106 and VCR-201 through 206) may be opened under Technical Specification 3/4.6.1.7.

CONTAINMENT SYSTEMS

CONTAINMENT VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.1.7 The containment purge supply and exhaust isolation valves shall be closed except when operation of the containment purge system is required for safety related reasons. No more than one purge supply path and one purge exhaust path shall be open at a time.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

- a. With one containment purge supply and/or one exhaust isolation valve inoperable, isolate the affected penetration by use of at least one automatic valve secured in the closed position, and, within 72 hours, either:
 - 1) Restore the inoperable valve to OPERABLE status, or,
 - 2) Deactivate the automatic valve secured in the closed position.
- b. Operation may then continue until performance of the next required valve test provided that the automatic valve secured in the closed position is verified to be deactivated in the closed position at least once per 31 days.
- c. Otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- d. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.6.1.7.1 The surveillance requirements of Technical Specification 3/4.6.3.1 apply.

CONTAINMENT SYSTEMS

BASES

3/4.6.1.7 CONTAINMENT PURGE AND EXHAUST ISOLATION VALVES

This specification ensures that the containment purge supply and exhaust isolation valves are closed for the majority of the time during normal operation. It allows for containment purging for safety related reasons.* Safety-related reasons are meant to be the need to improve containment working conditions, e.g. reduce airborne activity, to perform surveillance and/or maintenance on a safety-related system or piece of equipment. The purge/vent system shall not be used to control containment atmosphere temperature and humidity. It is intended that purging and venting times will be as short as possible. Allowing purge operations in Modes 1, 2, 3, and 4 is more beneficial than a cooldown to Mode 5 from the standpoint of (a) imposing unnecessary thermal stress cycles on the reactor coolant system and its components and (b) reducing the potential for causing unnecessary challenges to the reactor trip and safeguards systems. The containment purge system is designed in accordance with the requirements of NRC Branch Technical Position CSB 6-4, Rev. 1. This includes, but is not limited to, an analysis of the impact of purging on ECCS performance, an evaluation of the radiological consequences of a design basis accident while purging, and limiting purge operation to using no more than one supply path and one exhaust path at a time. The purge isolation valves have been demonstrated capable of closing against the dynamic forces associated with a loss-of-coolant accident and are assured of receiving a Containment Ventilation Isolation signal. Reset switches have been protected against inadvertent use in a manner which facilitates the administrative controls governing their use. The use of the pressure relief (vent) line is allowed for containment pressure control. The purge and vent isolation valves do not use resilient seating/sealing material and are not subject to the type of environmental degradation common to resilient materials.

*The D. C. Cook purge estimate goal is two hundred (200) hours each year for each unit. This purge estimate is based on a plant capacity factor of 77%, and accounts for two purge operations per week. Each purge operation is assumed to be approximately 2 1/2 hours in duration. The annual 200-hour purge operation time limit amounts to less than 3% of the estimated plant operation time in Modes 1 through 4.

REFUELING OPERATIONS

CONTAINMENT PURGE AND EXHAUST ISOLATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.9.9 The Containment Purge and Exhaust isolation system* shall be OPERABLE.

APPLICABILITY: During Core Alterations or movement of irradiated fuel within the containment.

ACTION:

With the Containment Purge and Exhaust isolation system* inoperable, close each of the Purge and Exhaust penetrations providing direct access from the containment atmosphere to the outside atmosphere. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.9 The Containment Purge and Exhaust isolation system shall be demonstrated OPERABLE within 100 hours prior to the start of and at least once per 7 days during CORE ALTERATIONS by verifying that containment Purge and Exhaust isolation occurs on manual initiation and on a high radiation test signal from each of the containment radiation monitoring instrumentation monitors.

* During the refueling outage commencing about November 1982, the Containment Purge and Exhaust Isolation System shall be defined to include a radiation signal to either the inner or outer valve or a provision for immediate manual closure of the valve in the event the valve closure may be required. This definition is temporary and it and this footnote shall no longer apply following the refueling outage commencing about November 1982. For the temporary relief period, the provisions of Specification 3.0.4 are not applicable.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 66 TO FACILITY OPERATING LICENSE NO. DPR-58
AND AMENDMENT NO. 47 TO FACILITY OPERATING LICENSE NO. DPR-74
INDIANA AND MICHIGAN ELECTRIC COMPANY
D. C. COOK UNITS 1 AND 2
DOCKET NOS. 50-315 AND 50-316

Background

The Containment Systems Branch (CSB) evaluation of the generic issue of containment purging and venting during normal plant operation (MPA B-24) was transmitted to J. Dolan of the Indiana and Michigan Electric Company by letter dated October 30, 1981. The only remaining issues requiring CSB attention are the purge valve test frequency and the allowable number of hours per year of purge/vent system operation. D. C. Cook Unit 2 is presently barred from purging during Modes 1, 2, 3, and 4 whereas D. C. Cook Unit 1 is allowed to purge in accordance with the October 23, 1979 NRC Interim Position on this topic.

Evaluation

The CSB position on frequency for purge/vent valve leakage testing (three month interval for active valves and six month interval for passive valves) applies to valves with resilient seat material. The licensee has replaced all purge valves in Cook, Unit 1 with valves having non-resilient seats, and will do the same for the Cook, Unit 2 purge valves during the refueling outage beginning in November 1982. Therefore, we find acceptable the licensee's position that the purge valves need not be tested more frequently than as required by Appendix J.

The licensee has committed to operate the containment purge system for safety related reasons only and will not exceed 200 hours of operation per year. We have reviewed the justifications provided for this annual usage and find them acceptable.

The proposed changes to the Technical Specifications, attached to the August 30, 1982 letter from R. Hunter of the Indiana and Michigan Electric Company to H. Denton of the NRC, contain the necessary changes for purge system operation during normal plant operations. We have reviewed these proposed changes to the Technical Specifications and find them acceptable.

For Cook, Unit 2, the licensee plans to upgrade the radiation monitors and replace the present purge valves with valves having non-resilient seats during the refueling outage scheduled to begin in November, 1982. These modifications have already been made for Cook, Unit 1. To accomplish this, the licensee requested by its letter dated October 29, 1982, a temporary relief from the requirements of certain specifications in the Cook, Unit 2 Technical Specifications (T/S) namely, 3.9.9 and 3.3.3.1 regarding the "Action Statement" while in Mode 6 (refueling); They also requested relief from T/S 3.04 to allow the transition from Mode 5 to Mode 6 while in an "Action Statement".

The staff has reviewed these proposed changes to the Technical Specifications and the operations proposed by the licensee, and concludes that the only relief needed is from T/S 3.9.9, and then only when purging is taking place while in Mode 6. T/S 3.9.9 states that the containment purge and exhaust isolation system must be operable during core alterations or movement of irradiated fuel within the containment. T/S 3.9.9 will be satisfied as purge valves are replaced, as long as the redundant purge valve is maintained closed. T/S 3.3.3.1 will not be effective until after the 1982 refueling outage, and T/S 3.04 will not be violated by removing radiation monitors from service since no core alterations or irradiated fuel movement will take place as plant operations move from Mode 5 to 6.

To meet the provisions of T/S 3.9.9, which provides that each purge system isolation valve that is open during core alterations or irradiated fuel movement (i.e., Mode 6) must have a high radiation isolation signal, the licensee proposes the following:

- 1) One of the two valves in series will have an automatic isolation signal generated from radiation monitors located inside containment; and
- 2) The other valve in series, which will not receive a high radiation isolation signal as the replacement of radiation monitors by plant personnel progresses, will be closed by a control room operator when containment area radiation monitors alarm in the control room.

The staff finds this interim method of meeting T/S 3.9.9 acceptable.

Environmental Consideration

We have determined that the amendments do not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendments involve an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of these amendments.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendments do not authorize a significant increase in the probability or consequences of an accident previously evaluated, do not create the possibility of an accident of a type different from any evaluated previously, and do not involve a significant reduction in a margin of safety, the amendments do not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Date: December 8, 1982

Principal Contributor:
M. Fields

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NOS 50-315 AND 50-316INDIANA AND MICHIGAN ELECTRIC COMPANYNOTICE OF ISSUANCE OF AMENDMENTS TO FACILITY
OPERATING LICENSES

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 66 to Facility Operating License-No. DPR-58, and Amendment No. 47 to Facility Operating License No. DPR-74 issued to the Indiana and Michigan Electric Company (the licensee), which revised Technical Specifications for operation of D. C. Cook Units 1 and 2 (the facilities) located in Berrien County, Michigan. The amendments are effective as of the date of issuance.

The amendments revise the Technical Specifications to allow containment purging during operation and to allow purge and vent modifications required as part of the TMI Action Plan.

The application for the amendments complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendments. Prior public notice of these amendments was not required since the amendments do not involve a significant hazards consideration.

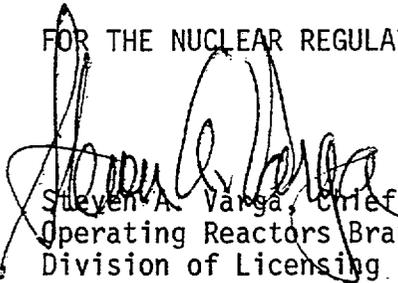
- 2 -

The Commission has determined that the issuance of these amendments will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of these amendments.

For further details with respect to this action, see (1) the application for amendments dated August 30, 1982, as supplemented by letters dated October 29, 1982 and November 19, 1982, (2) Amendment Nos. 66 and 47 to License Nos. DPR-58 and DPR-74, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C. and at the Maude Reston Palenske Memorial Library, 500 Market Street, St. Joseph, Michigan 49085. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 28th day of December, 1982.

FOR THE NUCLEAR REGULATORY COMMISSION



Steven A. Varga, Chief
Operating Reactors Branch No. 1
Division of Licensing