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November 22, 1983

Docket Nos. 50-315  
and 50-316

Mr. John Dolan, Vice President  
Indiana and Michigan Electric Company  
c/o American Electric Power Service Corporation  
1 Riverside Plaza  
Columbus, Ohio 43216

Dear Mr. Dolan:

The Commission has issued the enclosed Amendment No. 76 to Facility Operating License No. DPR-58 and Amendment No. 57 to Facility Operating License No. DPR-74 for the Donald C. Cook Nuclear Plant, Unit Nos. 1 and 2, respectively. The amendments consist of changes to the Technical Specifications in response to your application transmitted by letter dated January 22, 1982, as supplemented by letter dated July 3, 1983.

These amendments revise the Technical Specifications to upgrade the surveillance requirements for nuclear instrumentation to be consistent for both units and the Standard Technical Specifications and to change the loss of voltage and degraded grid voltage trip tolerance bands within the analyses previously performed for the Donald C. Cook Nuclear Plant.

A copy of the related Safety Evaluation is enclosed. The Notice of Issuance will be included in the Commission's next regular monthly Federal Register notice.

Sincerely,

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

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 PDR ADOCK 05000315  
 P PDR

Enclosures:

1. Amendment No. 76 to DPR-58
2. Amendment No. 57 to DPR-74
3. Safety Evaluation

cc w/enclosures:  
See next page

\* In the processing of these Amendments the original concurrence copy was inadvertently lost. The following concurrences are provided to attest to the fact that the amendments were properly reviewed and concurred on.

OFFICE	*ORB #1	*ORB #1	*ORB #1	*ELD			
SURNAME	DWigginton	C Parrish	S Varga	NK			
DATE	12/7/83	12/1/83	12/1/83	12/8/83			

Indiana and Michigan Electric Company

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Honorable Jim Catania, Mayor  
City of Bridgman, Michigan 49106

U.S. Environmental Protection Agency  
Region V Office  
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Director  
Department of Public Health  
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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

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 76  
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 January 22, 1982, as supplemented by letter dated July 3, 1983, 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.

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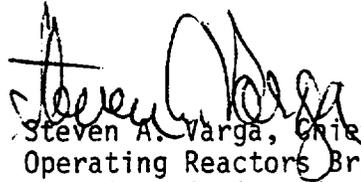
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-58 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 76, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. The change in Technical Specifications is to become effective within 30 days of issuance of this amendment. In the period between issuance of the amendment and the effective date of the new Technical Specifications, the licensee shall adhere to the Technical Specifications for the systems, components, or operation existing at the time. The period of time between changeover of systems, components, or operation shall be minimized or compensated for by suitable temporary alternatives.
4. This license amendment is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



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

Attachment:  
Changes to Technical  
Specifications

Date of Issuance: November 22, 1983



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

INDIANA AND MICHIGAN ELECTRIC COMPANY

DOCKET NO. 50-316

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 57  
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 January 22, 1982, as supplemented by letter dated July 3, 1983, 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.

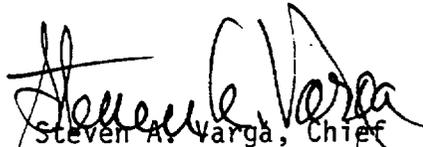
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-74 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 57, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. The change in Technical Specifications is to become effective within 30 days of issuance of this amendment. In the period between issuance of the amendment and the effective date of the new Technical Specifications, the licensee shall adhere to the Technical Specifications for the systems, components, or operation existing at the time. The period of time between changeover of systems, components, or operation shall be minimized or compensated for by suitable temporary alternatives.
4. This license amendment is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



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

Attachment:  
Changes to Technical  
Specifications

Date of Issuance: November 22, 1983

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 76 TO FACILITY OPERATING LICENSE NO. DPR-58

AMENDMENT NO. 57 TO FACILITY OPERATING LICENSE NO. DPR-74

DOCKET NOS. 50-315 AND 50-316

Revise Appendix A as follows:

Remove Pages - Unit 1

3/4 3-11

3/4 3-12

3/4 3-13

3/4 3-14

3/4 3-26a

Insert Pages - Unit 1

3/4 3-11\*

3/4 3-12

3/4 3-13\*

3/4 3-14

3/4 3-26a

Remove Pages - Unit 2

3/4 3-11

3/4 3-12

3/4 3-13

3/4 3-14

3/4 3-25a

Insert Pages - Unit 2

3/4 3-11

3/4 3-12\*

3/4 3-13

3/4 3-14\*

3/4 3-25a

\*Included for convenience only

TABLE 3.3-2 (Continued)

REACTOR TRIP SYSTEM INSTRUMENTATION RESPONSE TIMES

<u>FUNCTIONAL UNIT</u>	<u>RESPONSE TIME</u>
12. Loss of Flow - Single Loop (Above P-8)	$\leq$ 0.6 seconds
13. Loss of Flow - Two Loops (Above P-7 and below P-8)	$\leq$ 0.6 seconds
14. Steam Generator Water Level--Low-Low	$\leq$ 1.5 seconds
15. Steam/Feedwater Flow Mismatch and Low Steam Generator Water Level	NOT APPLICABLE
16. Undervoltage-Reactor Coolant Pumps	$\leq$ 1.2 seconds
17. Underfrequency-Reactor Coolant Pumps	$\leq$ 0.6 seconds
18. Turbine Trip	
A. Low Fluid Oil Pressure	NOT APPLICABLE
B. Turbine Stop Valve	NOT APPLICABLE
19. Safety Injection Input from ESF	NOT APPLICABLE
20. Reactor Coolant Pump Breaker Position Trip	NOT APPLICABLE

D. C. COOK-UNIT 1

3/4 3-11

TABLE 4.3-1

REACTOR TRIP SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>FUNCTIONAL UNIT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES IN WHICH SURVEILLANCE REQUIRED</u>
1. Manual Reactor Trip	N.A.	N.A.	S/U(1)	N.A.
2. Power Range, Neutron Flux	S	D(2), M(3) and Q(6)	M	1, 2
3. Power Range, Neutron Flux, High Positive Rate	N.A.	R(6)	M	1, 2
4. Power Range, Neutron Flux, High Negative Rate	N.A.	R(6)	M	1, 2
5. Intermediate Range, Neutron Flux	S	R(6)	S/U(1)	1, 2 and *
6. Source Range, Neutron Flux	S	R(6)	M and S/U(1)	2(7), 3(7), 4 and 5
7. Overtemperature $\Delta T$	S	R	M	1, 2
8. Overpower $\Delta T$	S	R	M	1, 2
9. Pressurizer Pressure--Low	S	R	M	1, 2
10. Pressurizer Pressure--High	S	R	M	1, 2
11. Pressurizer Water Level--High	S	R	M	1, 2
12. Loss of Flow - Single Loop	S	R	M	1

D. C. COOK-UNIT 1

3/4 3-12

Amendment No. 76 and 57

TABLE 4.3-1 (Continued)

REACTOR TRIP SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

D. C. COOK-UNIT 1

3/4 3-13

<u>FUNCTIONAL UNIT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES IN WHICH SURVEILLANCE REQUIRED</u>
13. Loss of Flow - Two Loops	S	R	N.A.	1
14. Steam Generator Water Level-- Low-Low	S	R	M	1, 2
15. Steam/Feedwater Flow Mismatch and Low Steam Generator Water Level	S	R	M	1, 2
16. Undervoltage - Reactor Coolant Pumps	N.A.	R	M	1
17. Underfrequency - Reactor Coolant Pumps	N.A.	R	M	1
18. Turbine Trip				
A. Low Fluid Oil Pressure	N.A.	N.A.	S/U(1)	1, 2
B. Turbine Stop Valve Closure	N.A.	N.A.	S/U(1)	1, 2
19. Safety Injection Input from ESF	N.A.	N.A.	M(4)	1, 2
20. Reactor Coolant Pump Breaker Position Trip	N.A.	N.A.	R	N.A.
21. Reactor Trip Breaker	N.A.	N.A.	M(5) and S/U(1)	1, 2*
22. Automatic Trip Logic	N.A.	N.A.	M(5)	1, 2*

TABLE 4.3-1 (Continued)

NOTATION

- \* - With the reactor trip system breakers closed and the control rod drive system capable of rod withdrawal.
- (1) - If not performed in previous 7 days.
- (2) - Heat balance only, above 15% of RATED THERMAL POWER.
- (3) - Compare incore to excore axial imbalance above 15% of RATED THERMAL POWER. Recalibrate if absolute difference  $\geq$  3 percent.
- (4) - Manual ESF functional input check every 18 months.
- (5) - Each train tested every other month.
- (6) - Neutron detectors may be excluded from CHANNEL CALIBRATION.
- (7) - Below P-6 (BLOCK OF SOURCE RANGE REACTOR TRIP) setpoint. |

TABLE 3.3-4 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION TRIP SETPOINTS

<u>FUNCTIONAL UNIT</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUES</u>
6. MOTOR DRIVEN AUXILIARY FEEDWATER PUMPS		
a. Steam Generator Water Level -- Low-Low	$\geq$ 17% of narrow range instrument span each steam generator	$\geq$ 16% of narrow range instrument span each steam generator
b. 4 kv Bus Loss of Voltage	3196 volts with a 2-second delay	3196, +18, -36 volts with a $\pm$ 2.2 second delay
c. Safety Injection	Not Applicable	Not Applicable
d. Loss of Main Feedwater Pumps	Not Applicable	Not Applicable
7. TURBINE DRIVEN AUXILIARY FEEDWATER PUMPS		
a. Steam Generator Water Level -- Low-Low	$\geq$ 17% of narrow range instrument span each steam generator	$\geq$ 16% or narrow range instrument span each steam generator
b. Reactor Coolant Pump Bus Undervoltage	$\geq$ 2750 Volts--each bus	$\geq$ 2725 Volts--each bus
8. LOSS OF POWER		
a. 4 kv Bus Loss of Voltage	3196 volts with a 2-second delay	3196, +18, -36 volts with a $\pm$ 2.2 second delay
b. 4 kv Bus Degraded Voltage	3596 volts with a 2.0 min. time delay	3596, +36, -18 volts with a 2.0 minute $\pm$ 6 second time delay

D. C. COOK - UNIT 1

3/4 3-26a

Amendment No. 76 and 57

TABLE 4.3-1

REACTOR TRIP SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>FUNCTIONAL UNIT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES IN WHICH SURVEILLANCE REQUIRED</u>
1. Manual Reactor Trip	N.A.	N.A.	S/U(1)	N.A.
2. Power Range, Neutron Flux	S	D(2), M(3) and Q(6)	M	1, 2
3. Power Range, Neutron Flux, High Positive Rate	N.A.	R(8)	M	1, 2
4. Power Range, Neutron Flux, High Negative Rate	N.A.	R(6)	M	1, 2
5. Intermediate Range, Neutron Flux	S	R(6)	S/U(1)	1, 2 and *
6. Source Range, Neutron Flux	S	R(6)	M and S/U(1)	2(7), 3(7), 4 and
7. Overtemperature $\Delta T$	S	R	M	1, 2
8. Overpower $\Delta T$	S	R	M	1, 2
9. Pressurizer Pressure--Low	S	R	M	1, 2
10. Pressurizer Pressure--High	S	R	M	1, 2
11. Pressurizer Water Level--High	S	R	M	1, 2
12. Loss of Flow - Single Loop	S	R	M	1

TABLE 4.3-1 (Continued)

REACTOR TRIP SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>FUNCTIONAL UNIT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES IN WHICH SURVEILLANCE REQUIRED</u>
13. Loss of Flow - Two Loops	S	R	N.A.	1
14. Steam Generator Water Level-- Low-Low	S	R	M	1, 2
15. Steam/Feedwater Flow Mismatch and Low Steam Generator Water Level	S	R	M	1, 2
16. Undervoltage - Reactor Coolant Pumps	N.A.	R	M	1
17. Underfrequency - Reactor Coolant Pumps	N.A.	R	M	1
18. Turbine Trip				
A. Low Fluid Oil Pressure	N.A.	N.A.	S/U(1)	1, 2
B. Turbine Stop Valve Closure	N.A.	N.A.	S/U(1)	1, 2
19. Safety Injection Input from ESF	N.A.	N.A.	M(4)	1, 2
20. Reactor Coolant Pump Breaker Position Trip	N.A.	N.A.	R	N.A.
21. Reactor Trip Breaker	N.A.	N.A.	M(5) and S/U(1)	1, 2*
22. Automatic Trip Logic	N.A.	N.A.	M(5)	1, 2*

TABLE 4.3-1 (Continued)

NOTATION

- \* - With the reactor trip system breakers closed and the control rod drive system capable of rod withdrawal.
- (1) - If not performed in previous 7 days.
- (2) - Heat balance only, above 15% of RATED THERMAL POWER. Adjust channel if absolute difference > 2 percent.
- (3) - Compare incore to excore axial offset above 15% of RATED THERMAL POWER. Recalibrate if absolute difference  $\geq$  3 percent.
- (4) - Manual ESF functional input check every 18 months.
- (5) - Each train tested every other month.
- (6) - Neutron detectors may be excluded from CHANNEL CALIBRATION.
- (7) - Below P-6 (BLOCK OF SOURCE RANGE REACTOR TRIP) setpoint.

## INSTRUMENTATION

### 3/4.3.2 ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

3.3.2.1 The Engineered Safety Feature Actuation System (ESFAS) instrumentation channels and interlocks shown in Table 3.3-3 shall be OPERABLE with their trip setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.3-4 and with RESPONSE TIMES as shown in Table 3.3-5.

APPLICABILITY: As shown in Table 3.3-3.

#### ACTION:

- a. With an ESFAS instrumentation channel trip setpoint less conservative than the value shown in the Allowable Values column of Table 3.3-4, declare the channel inoperable and apply the applicable ACTION requirement of Table 3.3-3 until the channel is restored to OPERABLE status with the trip setpoint adjusted consistent with the Trip Setpoint value.
- b. With an ESFAS instrumentation channel inoperable, take the ACTION shown in Table 3.3-3.

#### SURVEILLANCE REQUIREMENTS

4.3.2.1.1 Each ESFAS instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION and CHANNEL FUNCTIONAL TEST operations for the MODES, and at the frequencies shown in Table 4.3-2.

4.3.2.1.2 The logic for the interlocks shall be demonstrated OPERABLE during the automatic actuation logic test. The total interlock function shall be demonstrated OPERABLE at least once per 18 months during CHANNEL CALIBRATION testing of each channel affected by interlock operation.

4.3.2.1.3 The ENGINEERED SAFETY FEATURES RESPONSE TIME of each ESFAS function shall be demonstrated to be within the limit at least once per 18 months. Each test shall include at least one logic train such that both logic trains are tested at least once per 36 months and one channel per function such that all channels are tested at least once per N times 18 months where N is the total number of redundant channels in a specific ESFAS function as shown in the "Total No. of Channels" Column of Table 3.3-3.

TABLE 3.3-4 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION TRIP SETPOINTS

<u>FUNCTIONAL UNIT</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUES</u>
6. MOTOR DRIVEN AUXILIARY FEEDWATER PUMPS		
a. Steam Generator Water Level -- Low-Low	≥ 21% of narrow range instrument span each steam generator	≥ 20% of narrow range instrument span each steam generator
b. 4 kv Bus Loss of Voltage	3196 volts with a 2 second delay	3196, +18, -36 volts with a 2 ± 0.2 second delay
c. Safety Injection	Not Applicable	Not Applicable
d. Loss of Main Feedwater Pumps	Not Applicable	Not Applicable
7. TURBINE DRIVEN AUXILIARY FEEDWATER PUMPS		
a. Steam Generator Water Level -- Low-Low	≥ 21% of narrow range instrument span each steam generator	≥ 20% of narrow range instrument span each steam generator
b. Reactor Coolant Pump Bus Undervoltage	≥ 2750 Volts--each bus	≥ 2725 Volts--each bus
8. LOSS OF POWER		
a. 4 kv Bus Loss of Voltage	3196 volts with a 2 second delay	3196, +18, -36 volts with a 2 ± 0.2 second delay
b. 4 kv Bus Degraded Voltage	3596 volts with a 2.0 minute time delay	3596, +36, -18 volts with a 2.0 minute ± 6 second time delay



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 76 TO FACILITY OPERATING LICENSE NO. DPR-58  
AND AMENDMENT NO. 57 TO FACILITY OPERATING LICENSE NO. DPR-74  
INDIANA AND MICHIGAN ELECTRIC COMPANY  
DONALD C. COOK NUCLEAR PLANT UNIT NOS. 1 AND 2  
DOCKET NOS. 50-315 AND 50-316

Introduction

By letter dated January 22, 1982 (AEP:NRC:00591) and modified by letter dated July 8, 1983, (AEP:NRC:00591A), Indiana and Michigan Electric Company proposed amendments to Appendix A of Operating License Nos. DPR-58 and DPR-74. The request for changes to Appendix A included: (1) changes to the surveillance requirements concerning nuclear instruments of Section 4.3.1.1, Table 4.3-1, Functional Units 3, 4, 5, and 6; and (2) changes to the Loss of Voltage and Degraded Grid Voltages relay setpoint tolerances specified by Section 3.3.2.1, Table 3.3-4, Functional Units 6 and 8.

Discussion of Change No. 1

Nuclear Instrumentation is required to provide the associated Engineered Safety Feature action or reactor trip when a channel parameter exceeds its setpoint. The surveillance requirements for these instruments ensure that the overall functional capability is maintained comparable to the original design standards.

For clarification and consistency with general surveillance requirements and practices, the licensee proposed the following changes to Appendix A (Technical Specifications), Section 4.3.1.1, Table 4.3.1 for both Units 1 and 2:

- For Units 1 and 2, it was requested that the surveillance requirements for the "Source Range, Neutron Flux Channels" (Functional Unit 6) be modified so that the surveillances are required in MODES 2 and 3 only when the plant is below the P-6 permissive setpoint when the detectors are energized.
- For Units 1 and 2, the licensee requested to add a 12-hour CHANNEL CHECK requirement to the Source Range, Neutron Flux Channel (Functional Unit 6). This was requested to make the specifications of Appendix A consistent with Standardized Westinghouse Technical Specifications and current practice.

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PDR

- For Units 1 and 2, Note # (6) ("Neutron Detectors may be excluded from Channel Calibration") was added under the Channel Calibration requirements for Power Range Neutron Flux, High Positive Rate, and the Power Range Neutron Flux, High Negative Rate (Functional Units 3 and 4).

For Unit 1 only, the licensee requested that the requirement to perform a Channel Calibration on the Intermediate and Source Range Neutron Flux Channel (Functional Units 5 and 6) at least once per 18 months and a monthly Channel Functional Test of the Source Range Neutron Flux Channel be added. These changes would make Unit 1 Specifications consistent with Unit 2 and the Standard Technical Specification.

For Unit 2 only, the licensee proposed the deletion of the requirement to perform surveillances of the Source Range Neutron Flux Channels (Functional Unit 6) while in MODE 6. While in MODE 6, a weekly surveillance is required by Specification 4.9.2. This is also noted as being consistent with the Unit 1 Specification and the Standard Technical Specifications.

#### Evaluation of Change No. 1

The licensee's request to modify both units Source Range Neutron Flux Channel Surveillance requirements applicability so that surveillances are only required while in MODES 2 and 3 below the P-6 setpoint is consistent with the equipment operability requirements and capability. Source Range Detector high voltage must be secured after overlap with the Intermediate Range Detector is observed and the P-6 permissive setpoint is reached, making any further surveillances unnecessary until reactor power is again below the P-6 setpoint and the Source Range Channels are again placed in service.

The second requested change to add a 12-hour CHANNEL CHECK is consistent with current practice and provides for routine verification of detector channel operability.

The third requested change will note that the Power Range Neutron Flux High Positive and Negative Rate CHANNEL CALIBRATION need not include the neutron detector. This change is consistent with the Standard Technical Specifications which recognize that a calibration cannot be easily performed on the neutron detectors.

The changes requested for Unit 1 only to include CHANNEL CALIBRATION requirements for Intermediate and Source Range Neutron Flux channels and CHANNEL FUNCTIONAL TEST for the Source Range Neutron Flux channels are consistent with current operating practice and provide assurance of the operability and accuracy of detector channels.

The deletion of the MODE 6 surveillance requirements for the Unit 2 Source Range Neutron Flux Channel is consistent with the Standard Technical Specification guidance and is adequately covered by the MODE 6 requirements contained in Specification 4.9.2.

We find that the changes to the surveillance requirements for Unit Nos. 1 and 2 Technical Specification 4.3.1.1, Table 4.3-1, as discussed above are acceptable. We agree that the change will result in a more consistent requirement for the conduct of surveillances on the affected Reactor Trip System Instrumentation.

#### Discussion of Change No. 2

The licensee proposed changing the Loss-of-Voltage relay and Degraded Grid Voltage relay trip tolerances bands since the present tolerances are extremely conservative and the relays do not repeat their settings within the specified tolerances.

#### Evaluation of Change No. 2

Loss-of-voltage relays for the 4160 volt busses are specified to actuate at  $3196 \pm 18$  volts. This two-second relay provides for protection of the class IE loads from operation at reduced voltages. Due to difficulty in maintaining the specified tolerance, the licensee is requesting an expanded tolerance for the Loss-of-Voltage relays to  $3196 + 18, -36$  volts. This represents a low limit difference of .45% of the rated voltage for two seconds. This change would not pose a significantly increased hazard to motor operation while at the same time keeping the setpoint low to prevent unwanted automatic disconnection of the safety systems and challenges to the safety system power supplies (diesel generators).

Similar tolerance difficulties have been experienced with the Degraded Grid Voltage Relays which are specified to actuate at  $3596 \pm 18$  volts after a two minute  $\pm$  six second time delay. The proposed change to  $3596 + 36, -18$  volts is below the analyzed worst case continuous minimum bus voltage and does not present a significant increase in opportunity for unnecessary loss of auxiliary power supply.

We find that the licensee's proposal to change the tolerances on Table 3.3-4 of Section 3.6.3 of both Units 1 and 2 Technical Specifications as described above to be acceptable. We agree that the proposed changes are consistent with analyses performed by the licensee for Loss-of-Voltage and Degraded Grid Voltage events and will not adversely affect the health and safety of the public.

#### Environmental Consideration

We have determined that the amendment does 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 amendment involves 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 this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: November 22, 1983

Principal Contributor:  
E. R. Swanson



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

November 22, 1983

Docket Nos. 50-315  
and 50-316

Mr. John Dolan, Vice President  
Indiana and Michigan Electric Company  
c/o American Electric Power Service Corporation  
1 Riverside Plaza  
Columbus, Ohio 43216

Dear Mr. Dolan:

The Commission has issued the enclosed Amendment No. 76 to Facility Operating License No. DPR-58 and Amendment No. 57 to Facility Operating License No. DPR-74 for the Donald C. Cook Nuclear Plant, Unit Nos. 1 and 2, respectively. The amendments consist of changes to the Technical Specifications in response to your application transmitted by letter dated January 22, 1982, as supplemented by letter dated July 3, 1983.

These amendments revise the Technical Specifications to upgrade the surveillance requirements for nuclear instrumentation to be consistent for both units and the Standard Technical Specifications and to change the loss of voltage and degraded grid voltage trip tolerance bands within the analyses previously performed for the Donald C. Cook Nuclear Plant.

A copy of the related Safety Evaluation is enclosed. The Notice of Issuance will be included in the Commission's next regular monthly Federal Register notice.

Sincerely,

A handwritten signature in cursive script, appearing to read "D. Wigginton".

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

Enclosures:

1. Amendment No. 76 to DPR-58
2. Amendment No. 57 to DPR-74
3. Safety Evaluation

cc w/enclosures:  
See next page