

June 15, 1988

Docket Nos. 50-315
and 50-316

DISTRIBUTION:

Docket Files	DHagan
NRC PDR	EJordan
Local PDR	JPartlow
TBarnhart(8)	OGC
Wanda Jones	ARM/LFMB
GHolahan	EButcher
JStang	GPA/PA
RIIngram	ACRS(10)
LGreger, RIII	CGill, RII

Mr. Milton P. Alexich, Vice President
Indiana Michigan Power Company
c/o American Electric Power Service Corporation
1 Riverside Plaza
Columbus, Ohio 43216

Dear Mr. Alexich:

SUBJECT: AMENDMENTS NOS. 117 AND 103 TO FACILITY OPERATING LICENSES NOS. DPR-58
AND DPR-74: LIQUID RADWASTE EFFLUENT LINE MONITOR (TACS NOS. 66016/
66017)

The Commission has issued the enclosed Amendment No. 117 to Facility
Operating License No. DPR-58 and Amendment No. 103 to Facility Operating
License No. DPR-74 for the Donald C. Cook Nuclear Plant, Units Nos. 1 and 2.
The amendments consist of changes to the Technical Specifications in response
to your application dated December 8, 1986, as supplemented August 7, 1987.

These amendments revise the Technical Specifications to reflect the replacement
of the liquid radwaste effluent line monitor with a new monitor. The amendments
also add periodic Channel Functional Tests as a surveillance requirement and a
footnote to allow the existing monitor to meet the Technical Specification
requirements until the new monitor is operable.

A copy of our related Safety Evaluation is also enclosed. Notice of Issuance
will be included in the Commission's biweekly Federal Register notice.

Sincerely,

Original signed by

John F. Stang, Project Manager
Project Directorate III-1
Division of Reactor Projects - III, IV, V
& Special Projects

Enclosures:

1. Amendment No. 117 to DPR-58
2. Amendment No. 103 to DPR-74
3. Safety Evaluation

cc w/enclosures:
See next page

LA/PD31: DRSP
RIIngram
5/20/88

PM/PD31: DRSP
JStang
5/25/88

D/PD31: DRSP
DButcher
6/9/88

OGC
CB Barth
6/1/88

OFFICIAL RECORD COPY

8806220348 880615
PDR ADDCK 05000315
P PDR



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555
June 15, 1988

Dockets Nos. 50-315
and 50-316

Mr. Milton P. Alexich, Vice President
Indiana Michigan Power Company
c/o American Electric Power Service Corporation
1 Riverside Plaza
Columbus, Ohio 43216

Dear Mr. Alexich:

SUBJECT: AMENDMENTS NOS. 117 AND 103 TO FACILITY OPERATING LICENSES NOS. DPR-58
AND DPR-74: LIQUID RADWASTE EFFLUENT LINE MONITOR (TACS NOS. 66016/
66017)

The Commission has issued the enclosed Amendment No. 117 to Facility Operating License No. DPR-58 and Amendment No. 103 to Facility Operating License No. DPR-74 for the Donald C. Cook Nuclear Plant, Units Nos. 1 and 2. The amendments consist of changes to the Technical Specifications in response to your application dated December 8, 1986, as supplemented August 7, 1987.

These amendments revise the Technical Specifications to reflect the replacement of the liquid radwaste effluent line monitor with a new monitor. The amendments also add periodic Channel Functional Tests as a surveillance requirement and a footnote to allow the existing monitor to meet the Technical Specification requirements until the new monitor is operable.

A copy of our related Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

John F. Stang, Project Manager
Project Directorate III-1
Division of Reactor Projects - III, IV, V
& Special Projects

Enclosures:

1. Amendment No. 117 to DPR-58
2. Amendment No. 103 to DPR-74
3. Safety Evaluation

cc w/enclosures:
See next page

Mr. Milton Alexich
Indiana Michigan Power Company

Donald C. Cook Nuclear Plant

cc:

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

Mr. S. Brewer
American Electric Power
Service Corporation
1 Riverside Plaza
Columbus, Ohio 43216

Attorney General
Department of Attorney General
525 West Ottawa Street
Lansing, Michigan 48913

Township Supervisor
Lake Township Hall
Post Office Box 818
Bridgeman, Michigan 49106

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

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

Gerald Charnoff, Esquire
Shaw, Pittman, Potts and Trowbridge
2300 N Street, N.W.
Washington, DC 20037

Mayor, City of Bridgeman
Post Office Box 366
Bridgeman, Michigan 49106

Special Assistant to the Governor
Room 1 - State Capitol
Lansing, Michigan 48909

Nuclear Facilities and Environmental
Monitoring Section Office
Division of Radiological Health
Department of Public Health
3500 N. Logan Street
Post Office Box 30035
Lansing, Michigan 48909



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

INDIANA MICHIGAN POWER COMPANY

DOCKET NO. 50-315

DONALD C. COOK NUCLEAR PLANT, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No.117
License No. DPR-58

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Indiana Michigan Power Company (the licensee) dated December 8, 1986, as supplemented August 7, 1987, 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.

8806220358 880615
PDR ADOCK 05000315
P PDR

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:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 117, 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



Daniel R. Muller, Acting Director
Project Directorate III-1
Division of Reactor Projects - III, IV, V
& Special Projects

Attachment:
Changes to the Technical
Specifications

Date of Issuance: June 15, 1988



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

INDIANA MICHIGAN POWER COMPANY

DOCKET NO. 50-316

DONALD C. COOK NUCLEAR PLANT, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 103
License No. DPR-74

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Indiana Michigan Power Company (the licensee) dated December 8, 1986, as supplemented August 7, 1987, 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:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 103, 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



Daniel R. Muller, Acting Director
Project Directorate III-1
Division of Reactor Projects - III, IV, V
& Special Projects

Attachment:
Changes to the Technical
Specifications

Date of Issuance: June 15, 1988

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 117 FACILITY OPERATING LICENSE NO. DPR-58

AMENDMENT NO. 103 FACILITY OPERATING LICENSE NO. DPR-74

DOCKETS NOS. 50-315 AND 50-316

Revise Appendix A Technical Specifications by removing the pages identified below and inserting the attached pages. The revised pages are identified by amendment number and contain marginal lines indicating the area of change.

REMOVE

UNIT 1

3/4 3-58
3/4 3-60
3/4 3-61

INSERT

3/4 3-58
3/4 3-60
3/4 3-61

UNIT 2

3/4 3-54
3/4 3-56
3/4 3-57

3/4 3-54
3/4 3-56
3/4 3-57

TABLE 3.3-12

RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

<u>Instrument</u>	<u>Minimum Channels Operable</u>	<u>Applicability</u>	<u>Action</u>
1. Gross Radioactivity Monitors Providing Automatic Release Termination			
a. Liquid Radwaste Effluent Line (12-RRS-1001) ⁺	(1)#	At times of release	23
b. Steam Generator Blowdown Line (1-R-19)	(1)	At times of release	24
c. Steam Generator Blowdown Treatment Effluent (1-R-24)	(1)	At times of release	24
2. Gross Radioactivity Monitors Not Providing Automatic Release Termination			
a. Service Water System Effluent Line (1-R-20, 1-R-28)	(1)per train	At all times	25
3. Continuous Composite Sampler Flow Monitor			
a. Turbine Building Sump Effluent Line	(1)	At all times	25
4. Flow Rate Measurement Devices			
a. Liquid Radwaste Line(RFI-285)	(1)	At times of release	26
b. Discharge Pipes*	(1)	At all times	NA
c. Steam Generator Blowdown Treatment Effluent (1-DFI-352)	(1)	At times of release	26

* Pump curves and valve settings may be utilized to estimate flow; in such cases, Action Statement 26 is not applicable.

+ Monitor 1-R-18 may be used until 12-RRS-1001 is declared OPERABLE following initial installation.

OPERABILITY of 12-RRS-1001 includes OPERABILITY of flow switch RFS-1010, which is an attendant instrument as defined by Specification 1.6.

TABLE 4.3-8

RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>SOURCE CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>
1. Gross Beta or Gamma Radioactivity Monitors Providing Alarm and Automatic Isolation				
a. Liquid Radwaste Effluent Line (12-RRS-1001)	D*	P	R(3)	Q(5)
b. Steam Generator Blowdown Effluent Line	D*	M	R(3)	Q(1)
c. Steam Generator Blowdown Treatment Effluent Line	D*	M	R(3)	Q(1)
2. Gross Beta or Gamma Radioactivity Monitors Providing Alarm But Not Providing Automatic Isolation				
a. Service Water System Effluent Line	D	M	R(3)	Q(2)
3. Continuous Composite Samplers				
a. Turbine Building Sump Effluent Line	D	N/A	N/A	N/A
4. Flow Rate Monitors				
a. Liquid Radwaste Effluent	D(4)*	N/A	R	Q
b. Steam Generator Blowdown Treatment Line	D(4)*	N/A	N/A	N/A

*During Releases Via This Pathway

TABLE 4.3-8 (Cont)

TABLE NOTATION

- (1) The CHANNEL FUNCTIONAL TEST shall also demonstrate that automatic isolation of this pathway and control room alarm annunciation occurs if any of the following conditions exists:
1. Instrument indicates measured levels above the alarm/trip setpoint.
 - **2. Circuit failure.*
 - **3. Instrument indicates a downscale failure.*
 - **4. Instrument control not set in operating mode.*
- (2) The CHANNEL FUNCTIONAL TEST shall also demonstrate that control room alarm annunciation occurs if any of the following conditions exists:
1. Instrument indicates measured levels above the alarm setpoint.
 - **2. Circuit failure.
 - **3. Instrument indicates a downscale failure.
 - **4. Instrument controls not set in operating mode.
- (3) The initial CHANNEL CALIBRATION shall be performed using one or more sources with traceability back to the National Bureau of Standards. These sources shall permit calibrating the system over its intended range of energy and measurement range. For subsequent CHANNEL CALIBRATION, sources that have been related to the initial calibration may be used.
- (4) CHANNEL CHECK shall consist of verifying indication of flow during periods of release. CHANNEL CHECK shall be made at least once per 24 hours on days on which continuous, periodic or batch releases are made.
- (5) The CHANNEL FUNCTIONAL TEST shall also demonstrate that automatic isolation of this pathway and control room alarm annunciation occurs if any of the following conditions exists:
1. Instrument indicates measured levels above the alarm/trip setpoint.
 - **2. Circuit failure.***
 - **3. Instrument indicates a downscale failure.***
 - **4. Instrument control not set in operating mode.*
 - **5. Loss of sample flow.

- * Instrument indicates, but does not provide for automatic isolation.
** As equipment becomes operational.
*** Instrument indicates, but does not necessarily cause automatic isolation; however, no credit is taken for automatic isolation on such occurrences.

TABLE 3.3-12

RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

<u>Instrument</u>	<u>Minimum Channels Operable</u>	<u>Applicability</u>	<u>Action</u>
1. Gross Radioactivity Monitors Providing Automatic Release Termination			
a. Liquid Radwaste Effluent Line (12-RRS-1001) ⁺	(1) [#]	At times of release	23
b. Steam Generator Blowdown Line (2-R-19)	(1)	At times of release	24
c. Steam Generator Blowdown Treatment Effluent (2-R-24)	(1)	At times of release	24
2. Gross Radioactivity Monitors Not Providing Automatic Release Termination			
a. Service Water System Effluent Line (2-R-20, 2-R-28)	(1)per train	At all times	25
3. Continuous Composite Sampler Flow Monitor			
a. Turbine Building Sump Effluent Line	(1)	At all times	25
4. Flow Rate Measurement Devices			
a. Liquid Radwaste Line(RFI-285)	(1)	At times of release	26
b. Discharge Pipes*	(1)	At all times	NA
c. Steam Generator Blowdown Treatment Effluent (2-DFI-352)	(1)	At times of release	26

* Pump curves and valve settings may be utilized to estimate flow; in such cases, Action Statement 26 is not applicable.

+ Monitor 2-R-18 may be used until 12-RRS-1001 is declared OPERABLE following initial installation.

OPERABILITY of 12-RRS-1001 includes OPERABILITY of flow switch RFS-1010, which is an attendant instrument as defined by Specification 1.6.

TABLE 4.3-8

RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>SOURCE CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>
1. Gross Beta or Gamma Radioactivity Monitors Providing Alarm and Automatic Isolation				
a. Liquid Radwaste Effluent Line (12-RRS-1001)	D*	P	R(3)	Q(5)
b. Steam Generator Blowdown Effluent Line	D*	M	R(3)	Q(1)
c. Steam Generator Blowdown Treatment Effluent Line	D*	M	R(3)	Q(1)
2. Gross Beta or Gamma Radioactivity Monitors Providing Alarm But Not Providing Automatic Isolation				
a. Service Water System Effluent Line	D	M	R(3)	Q(2)
3. Continuous Composite Samplers				
a. Turbine Building Sump Effluent Line	D	N/A	N/A	N/A
4. Flow Rate Monitors				
a. Liquid Radwaste Effluent	D(4)*	N/A	R	Q
b. Steam Generator Blowdown Treatment Line	D(4)*	N/A	N/A	N/A

*During Releases Via This Pathway

TABLE 4.3-8 (Cont)

TABLE NOTATION

- (1) The CHANNEL FUNCTIONAL TEST shall also demonstrate that automatic isolation of this pathway and control room alarm annunciation occurs if any of the following conditions exists:
1. Instrument indicates measured levels above the alarm/trip setpoint.
 - **2. Circuit failure.*
 - **3. Instrument indicates a downscale failure.*
 - **4. Instrument control not set in operating mode.*
- (2) The CHANNEL FUNCTIONAL TEST shall also demonstrate that control room alarm annunciation occurs if any of the following conditions exists:
1. Instrument indicates measured levels above the alarm setpoint.
 - **2. Circuit failure.
 - **3. Instrument indicates a downscale failure.
 - **4. Instrument controls not set in operating mode.
- (3) The initial CHANNEL CALIBRATION shall be performed using one or more sources with traceability back to the National Bureau of Standards. These sources shall permit calibrating the system over its intended range of energy and measurement range. For subsequent CHANNEL CALIBRATION, sources that have been related to the initial calibration may be used.
- (4) CHANNEL CHECK shall consist of verifying indication of flow during periods of release. CHANNEL CHECK shall be made at least once per 24 hours on days on which continuous, periodic or batch releases are made.
- (5) The CHANNEL FUNCTIONAL TEST shall also demonstrate that automatic isolation of this pathway and control room alarm annunciation occurs if any of the following conditions exists:
1. Instrument indicates measured levels above the alarm/trip setpoint.
 - **2. Circuit failure.***
 - **3. Instrument indicates a downscale failure.***
 - **4. Instrument control not set in operating mode.*
 - **5. Loss of sample flow.
- * Instrument indicates, but does not provide for automatic isolation.
** As equipment becomes operational.
*** Instrument indicates, but does not necessarily cause automatic isolation; however, no credit is taken for automatic isolation on such occurrences.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 117 TO FACILITY OPERATING LICENSE NO. DPR-58
AND AMENDMENT NO. 103 TO FACILITY OPERATING LICENSE NO. DPR-74
INDIANA MICHIGAN POWER COMPANY
DONALD C. COOK NUCLEAR PLANT, UNITS NOS. 1 AND 2
DOCKETS NOS. 50-315 AND 50-316

1.0 INTRODUCTION

By letter dated December 8, 1986, as supplemented August 7, 1987, the Indiana Michigan Power Company (the licensee) requested amendments to the Technical Specifications (TSs) appended to Facility Operating Licenses Nos. DPR-58 and DPR-74 for the Donald C. Cook Nuclear Plant, Units Nos. 1 and 2. The proposed amendments would revise the TSs by replacing the liquid radwaste effluent line monitor designated as R-18 with a new monitor designated as RRS-1001. The amendments would also add periodic Channel Functional Tests as a surveillance requirement and a footnote to allow R-18 to meet the TS requirement until the new monitor, RRS-1001, is operable.

2.0 EVALUATION

The licensee has proposed to change the monitor designation in TS Table 3.3-12, Item 1.a, from 1-R-18 (Unit 1) and 2-R-18 (Unit 2) to 12-RRS-1001 to reflect the new monitor. Additional changes are proposed to: (1) allow the existing monitor to be used until the new monitor is operable, (2) indicate that operability of flowswitch RFS-1010 is required for operability of the new monitor, and (3) specify Channel Functional Test surveillance requirements for the new monitor. The reason for this request is to replace the existing liquid radwaste effluent line monitor, which has experienced continuing problems due to radioactive material buildup on the interior monitor surfaces and resultant background radiation interference which hinders the ability of the monitor to detect low radioactive discharge concentrations. The new monitor will be less susceptible to long-term radioactive material buildup and also more sensitive to the gamma component of the liquid radioactive effluent. Thus, the new monitor's performance will improve over the existing monitor.

Our review of the proposed changes indicates that the proposal is acceptable and does not affect the reliability or operability of safety systems as required for safe plant operation, shutdown, or accident mitigation.

Based on the above evaluation, we find the proposed changes to the TSs acceptable.

8806220359 880615
PDR ADOCK 05000315
P PDR

3.0 ENVIRONMENTAL CONSIDERATION

These amendments involve a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and a change in a surveillance requirement. We have determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that these amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of these amendments.

4.0 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 the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Date: June 15, 1988

Principal Contributor: L. R. Greger and C. F. Gill