February 10, 1995

Mr. E. E. Fitzpatrick, Vice President
Indiana Michigan Power Company
c/o American Electric Power Service Corporation
1 Riverside Plaza
Columbus, OH 43215

SUBJECT: DONALD C. COOK NUCLEAR PLANT, UNIT NOS. 1 AND 2 - ISSUANCE OF AMENDMENT RE: RELOCATION OF THE RADIOLOGICAL EFFLUENT TECHNICAL SPECIFICATIONS (TAC NOS. M90179 AND M90180)

Dear Mr. Fitzpatrick:

The Commission has issued the enclosed Amendment No. 189 to Facility Operating License No. DPR-58 and Amendment No. 175 to Facility Operating License No. DPR-74 for the Donald C. Cook Nuclear Plant, Unit Nos. 1 and 2. The amendments consist of changes to the Technical Specifications (TS) in response to your application dated August 3, 1994.

The amendments relocate the radiological effluent TS to other controlled documents. Your application was in response to guidance provided in NRC Generic Letter 89-01.

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 B. Hickman, Project Manager
Project Directorate III-1
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Docket Nos. 50-315 and 50-316

Enclosures: 1. Amendment No. 189 to DPR-58
2. Amendment No. 175 to DPR-74
3. Safety Evaluation

cc w/encl: See next page

DOCUMENT NAME: G:\WPDOCS\DCCOOK\DC90179.AMD

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DATE	1/5/95		1/6/95		2/3/95		2/10/95	

Pending final TS page check.

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DF01

DATED: February 10, 1995

AMENDMENT NO. 189 TO FACILITY OPERATING LICENSE NO. DPR-58-D. C. COOK - UNIT 1
AMENDMENT NO. 175 TO FACILITY OPERATING LICENSE NO. DPR-74-D. C. COOK - UNIT 2

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

INDIANA MICHIGAN POWER COMPANY

DOCKET NO. 50-315

DONALD C. COOK NUCLEAR PLANT, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 189
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 August 3, 1994, 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:

   Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 189, 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 issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Kevin A. Connaughton for

John N. Hannon, Director
Project Directorate III-1
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: February 10, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 189

TO FACILITY OPERATING LICENSE NO. DPR-58

DOCKET NO. 50-315

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 vertical lines indicating the area of change.

REMOVE	INSERT
I	I
II	II
V	V
X	X
XI	XI
XII	XII
XIII	XIII
XIV	XIV
XV	XV
XVI	XVI
XVII	XVII
XVIII	-
1-5	1-5
1-6	1-6
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3/4 3-36b	-
3/4 3-38	3/4 3-38
3/4 3-38a	3/4 3-38a
3/4 3-38b	-
3/4 3-57	3/4 3-57
3/4 3-58	3/4 3-58
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3/4 3-62	-
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3/4 3-66	-
3/4 3-67	-
3/4 3-68	-
3/4 11-1	3/4 11-1
3/4 11-2	3/4 11-2
3/4 11-3	3/4 11-3
3/4 11-4	-
3/4 11-5	-
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B 3/4 3-7	B 3/4 3-7
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B 3/4 11-3	-
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DEFINITIONS

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1.0 DEFINITIONS

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LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

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ADMINISTRATIVE CONTROLS

DEFINITIONS

FREQUENCY NOTATION

1.21 The FREQUENCY NOTATION specified for the performance of Surveillance Requirements shall correspond to the intervals defined in Table 1.2.

REACTOR TRIP SYSTEM RESPONSE TIME

1.22 The REACTOR TRIP SYSTEM RESPONSE TIME shall be the time interval from when the monitored parameter exceeds its trip setpoint at the channel sensor until loss of stationary gripper coil voltage.

ENGINEERED SAFETY FEATURE RESPONSE TIME

1.23 The ENGINEERED SAFETY FEATURE RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its ESF actuation setpoint at the channel sensor until the ESF equipment is capable of performing its safety function (i.e., the valves travel to their required positions, pump discharge pressures reach their required values, etc.). Times shall include diesel generator starting and sequence loading delays where applicable.

AXIAL FLUX DIFFERENCE

1.24 AXIAL FLUX DIFFERENCE shall be the difference in normalized flux signals between the top and bottom halves of a two section excore neutron detector.

PHYSICS TESTS

1.25 PHYSICS TESTS shall be those tests performed to measure the fundamental nuclear characteristics of the reactor core and related instrumentation and 1) described in Chapter 13.0 of the FSAR, 2) authorized under the provisions of 10 CFR 50.59, or 3) otherwise approved by the Commission.

$\bar{E}$ - AVERAGE DISINTEGRATION ENERGY

1.26 $\bar{E}$ shall be the average (weighted in proportion to the concentration of each radionuclide in the reactor coolant at the time of sampling) of the sum of the average beta and gamma energies per disintegration (in MeV) for isotopes, other than iodines, with half lives greater than 15 minutes, making up at least 95% of the total non-iodine activity in the coolant.

SOURCE CHECK

1.27 A SOURCE CHECK shall be the qualitative assessment of Channel response when the Channel sensor is exposed to a radioactive source.

DEFINITIONS

PROCESS CONTROL PROGRAM (PCP)

1.28 The PROCESS CONTROL PROGRAM (PCP) shall contain the current formulas, sampling, analyses, tests, and determinations to be made to ensure that processing and packaging of solid radioactive wastes based on demonstrated processing of actual or simulated wet solid wastes will be accomplished in such a way as to assure compliance with 10 CFR Parts 20, 61, and 71, state regulations, burial ground requirements, and other requirements governing the disposal of solid radioactive waste.

1.29 Deleted.

OFFSITE DOSE CALCULATION MANUAL (ODCM)

1.30 The OFFSITE DOSE CALCULATION MANUAL (ODCM) shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm/trip setpoints, and in the conduct of the Environmental Radiological Monitoring Program. The ODCM shall contain (1) the Radioactive Effluent Controls and Radiological Environmental Monitoring Programs required by Section 6.8.4 and (2) descriptions of the information that should be included in the Annual Radiological Environmental Operating and Annual Radioactive Effluent Release Reports required by Specifications 6.9.1.6 and 6.9.1.7.

GASEOUS RADWASTE TREATMENT SYSTEM

1.31 A GASEOUS RADWASTE TREATMENT SYSTEM is any system designed and installed to reduce radioactive gaseous effluents by collecting primary coolant system off-gases from the primary system and providing for delay or holdup for the purpose of reducing the total radioactivity prior to release to the environment.

VENTILATION EXHAUST TREATMENT SYSTEM

1.32 A VENTILATION EXHAUST TREATMENT SYSTEM is any system designed and installed to reduce gaseous radioiodine or radioactive material in particulate form in effluents by passing ventilation or vent exhaust gases through charcoal absorbers and/or HEPA filters for the purpose of removing iodines or particulates from the gaseous exhaust stream prior to the release to the environment. Such a system is not considered to have any effect on noble gas effluents. Engineered Safety Feature (ESF) atmospheric cleanup systems are not considered to be VENTILATION EXHAUST TREATMENT SYSTEM components.

PURGE-PURGING

1.33 PURGE or PURGING is the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration or other operating condition, in such a manner that replacement air or gas is required to purify the confinement.

VENTING

1.34 VENTING is the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration or other operating condition, in such manner that replacement air or gas is not provided or required during VENTING. Vent, used in system names, does not imply a VENTING process.

TABLE 3.3-6
RADIATION MONITORING INSTRUMENTATION
(OPERABILITY BASES DISCUSSED IN BASES SECTION 3/4 3.3.1)

OPERATION MODE/INSTRUMENT	MINIMUM CHANNELS OPERABLE	ALARM SETPOINT	TRIP SETPOINT	ACTION
1. Modes 1, 2, 3 & 4				
A. Area Monitors				
i. Upper Containment+ (VRS 1101/1201)	1	N/A	≤ 54 mR/hr	21
ii. Containment High Range (VRA 1310/1410)	2	≤ 10R/hr	N/A	22A
B. Process Monitors				
i. Particulate Channel+ (ERS 1301/1401)	1	N/A	≤ 2.52 μCi	20
ii. Noble Gas Channel+ (ERS 1305/1405)	1	N/A	≤ $4.4\times10^{-3}\frac{\mu Ci}{cc}$	20
C. Noble Gas Effluent Monitors				
i. Unit Vent Effluent Monitors				
a. Low Range (VRS 1505)	----------(see the ODCM)----------			
b. Mid Range (VRS 1507)	1	N/A	N/A	22B
c. High Range (VRS 1509)	1	N/A	N/A	22B
ii. Steam Generator PORV				
a. MRA 1601 (Loop 1)	1	N/A	N/A	22B
b. MRA 1602 (Loop 4)	1	N/A	N/A	22B
c. MRA 1701 (Loop 2)	1	N/A	N/A	22B
d. MRA 1702 (Loop 3)	1	N/A	N/A	22B
iii. Gland Steam Condenser Vent Monitor				
a. Low Range (SRA 1805)	----------(see the ODCM)----------			
iv. Steam Jet Air Ejector Vent Monitors				
a. Low Range (SRA 1905)	----------(see the ODCM)----------			
b. Mid Range (SRA 1907)	1	N/A	N/A	22B
c. High Range (SRA 1909)	1	N/A	N/A	22B

TABLE 3.3-6 (Continued)
RADIATION MONITORING INSTRUMENTATION
(OPERABILITY BASES DISCUSSED IN BASES SECTION 3/4 3.3.1)

OPERATION MODE/INSTRUMENT	MINIMUM CHANNELS OPERABLE	ALARM SETPOINT	TRIP SETPOINT	ACTION
2. Mode 6				
A. Train A	any 2/3 channels			22
i. Containment Area+ Radiation Channel (VRS 1101)		N/A	≤ 54 mR/hr	
ii. Particulate Channel+ (ERS 1301)		N/A	≤ 2.52 μCi	
iii. Noble Gas Channel+ (ERS 1305)		N/A	$\leq 4.4\times10^{-3}\frac{\mu Ci}{cc}$	
B. Train B	any 2/3 channels			22
i. Containment Area+ Radiation Channel (VRS 1201)		N/A	≤ 54 mR/hr	
ii. Particulate Channel+ (ERS 1401)		N/A	≤ 2.52 μCi	
iii. Noble Gas Channel+ (ERS 1405)		N/A	$\leq 4.4\times10^{-3}\frac{\mu Ci}{cc}$	
3. Mode ***				
A. Spent Fuel Storage (RRC-330)	1	≤ 15 mR/hr	≤ 15 mR/hr	21

+ This specification only applies during purge
*** With fuel in storage pool or building

TABLE 4.3-3

RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

OPERATION MODE/INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	APPLICABLE MODES
1. Modes 1, 2, 3 & 4				
A. Area Monitors				
i. Upper Containment (VRS 1101/1201)	S*	R	Q	1, 2, 3, 4
ii. Containment High Range (VRS 1310/1410)	S	R	Q	1, 2, 3, 4
B. Process Monitors				
i. Particulate Channel (ERS 1301/1401)	S*	R	Q	1, 2, 3, 4
C. Noble Gas Effluent Monitors				
i. Unit Vent Effluent Monitors				
a. Low Range (VRS 1505)	----------(see the ODCM)----------			
b. Mid Range (VRS 1507)	S	R	N/A	1, 2, 3, 4
c. High Range (VRS 1509)	S*	R	N/A	1, 2, 3, 4
ii. Steam Generator PORV				
a. MRA 1601 (Loop 1)	S*	R	Q	1, 2, 3, 4
b. MRA 1602 (Loop 4)	S*	R	Q	1, 2, 3, 4
c. MRA 1701 (Loop 2)	S*	R	Q	1, 2, 3, 4
d. MRA 1702 (Loop 3)	S*	R	Q	1, 2, 3, 4
iii. Gland Steam Condenser Vent Monitor				
a. Low Range (SRA 1805)	----------(see the ODCM)----------			
iv. Steam Jet Air Ejector Vent Monitors				
a. Low Range (SRA 1905)	----------(see the ODCM)----------			
b. Mid Range (SRA 1907)	S	R	Q	1, 2, 3, 4
c. High Range (SRA 1909)	S*	R	N/A	1, 2, 3, 4

TABLE 4.3-3 (Continued)
RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

OPERATION MODE/INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	APPLICABLE MODES
2. Mode 6				
A. Train A				6
i. Containment Area Radiation Channel (VRS 1101)	S*	R	Q	
ii. Particulate Channel (ERS 1301)	S*	R	Q	
iii. Noble Gas Channel (ERS 1305)	S*	R	Q	
B. Train B				6
i. Containment Area Radiation Channel (VRS 1201)	S*	R	Q	
ii. Particulate Channel (ERS 1401)	S*	R	Q	
iii. Noble Gas Channel (ERS 1405)	S*	R	Q	
3. Mode **				
A. Spent Fuel Storage (RRC-330)	S	R	Q	**

* To include SOURCE CHECK per T/S Section 1.27
** With fuel in storage pool or building

INSTRUMENTATION

EXPLOSIVE GAS MONITORING INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.3.9 The explosive gas monitoring instrumentation channels shown in Table 3.3-12 shall be OPERABLE with their alarm/trip setpoints set to ensure that the limits of Specification 3.11.2.1 are not exceeded.

APPLICABILITY: As shown in Table 3.3-12.

ACTION:

a. With an explosive gas monitoring instrumentation channel alarm/trip setpoint less conservative than the above specification, declare the channel inoperable and take the ACTION shown in Table 3.3-12.

b. With less than the minimum number of explosive gas monitoring instrumentation channels OPERABLE, take the ACTION shown in Table 3.3-12. Restore the inoperable instrumentation to OPERABLE status within 30 days. If unsuccessful, prepare and submit a SPECIAL REPORT to the Commission pursuant to Specification 6.9.2 to explain why this inoperability was not corrected in a timely manner.

c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.9 Each explosive gas monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK, CHANNEL CALIBRATION, and analog CHANNEL FUNCTIONAL TEST at the frequencies shown in Table 4.3-8.

TABLE 3.3-12

Explosive Gas Monitoring Instrumentation

Instrument (Instrument #)	Minimum Channels OPERABLE	Applicability	ACTION
1. Waste Gas Holdup System Explosive Gas Monitoring System[1]			
a. Hydrogen Monitor (QC-1400)	1	**	23
b. Oxygen Monitor (QC-1400, QC-370)	2	**	24

ACTION Statements

Action 23 With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, operation of this system may continue for up to 14 days, provided grab samples are taken and analyzed every 12 hours.

Action 24 With the number of channels OPERABLE one less than required by the Minimum Channels OPERABLE requirement, operation of this system may continue for up to 30 days. With 2 channels inoperable, operation of this system may continue for up to 30 days, provided grab samples are taken and analyzed every 12 hours.

** During waste gas holdup system operation.

---

[1] The waste gas holdup system explosive gas monitoring system may be inoperable for up to 160 days on a one-time basis for the purpose of replacing one oxygen monitor. During this time, grab samples for oxygen are to be taken and analyzed every 12 hours.

TABLE 4.3-8

Explosive Gas Monitoring Instrumentation Surveillance Requirements

Instrument (Instrument #)	CHANNEL CHECK	CHANNEL FUNCTIONAL TEST	CHANNEL CALIBRATION	Applicability
1. Waste Gas Holdup System Explosive Gas Monitoring System				
a. Hydrogen Monitor (QC-1400)	D	M	Q(1)	**
b. Oxygen Monitor (QC-1400, QC-370*)	D	M	Q(2)	**

Table Notation

(1) The CHANNEL CALIBRATION shall include the use of standard gas samples containing a nominal:

a. One volume percent hydrogen, balance nitrogen, and

b. Four volume percent hydrogen, balance nitrogen.

(2) The CHANNEL CALIBRATION shall include the use of standard gas samples containing a nominal:

a. One volume percent oxygen, balance nitrogen, and

b. Four volume percent oxygen, balance nitrogen.

** During waste gas holdup system operation.

---

* These surveillances are not required during the 160-day period in which this monitor is being replaced.

3/4.11 RADIOACTIVE EFFLUENTS

LIQUID HOLDUP TANKS*

LIMITING CONDITION FOR OPERATION

3.11.1 The quantity of radioactive material contained in each of the following tanks shall be limited to less than or equal to 10 curies, excluding tritium and dissolved or entrained noble gases.

a. Outside temporary tanks.

APPLICABILITY: At all times.

ACTION:

a. With the quantity of radioactive material in any of the above listed tanks exceeding the above limit, without delay suspend all additions of radioactive material to the tank and within 48 hours reduce the tank contents to within the limit.

b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.1 The quantity of radioactive material contained in each of the above listed tanks shall be determined to be within the above limit by analyzing a representative sample of the tank's contents at least once per 7 days when radioactive materials are being added to the tank.

* Tanks included in this Specification are those outdoor tanks that are not surrounded by liners, dikes, or walls capable of holding the tank contents and that do not have tank overflows and surrounding area drains connected to the liquid radwaste treatment system.

RADIOACTIVE EFFLUENTS

3/4.11.2 GASEOUS EFFLUENTS

EXPLOSIVE GAS MIXTURE

LIMITING CONDITION FOR OPERATION

3.11.2.1 The concentration of oxygen in the waste gas holdup system shall be limited to less than or equal to 3% by volume if the hydrogen in the system is greater than or equal to 4% by volume.

APPLICABILITY: At all times.

ACTION:

a. With the concentration of oxygen in the waste gas holdup system greater than 3% by volume but less than or equal to 4% by volume and containing greater than or equal to 4% hydrogen, restore the concentration of oxygen to less than or equal to 3% or reduce the hydrogen concentration to less than 4% within 96 hours.

b. With the concentration of oxygen in the waste gas holdup system or tank greater than 4% by volume and greater than 4% hydrogen by volume without delay suspend all additions of waste gases to the system or tank and reduce the concentration of oxygen to less than or equal to 3% or the concentration of hydrogen to less than or equal to 4% within 96 hours in the system or tank.

c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.2.1 The concentration of oxygen in the waste gas holdup system shall be determined to within the above limits by continuously monitoring the waste gases in the waste gas holdup system with the oxygen monitors required OPERABLE by Table 3.3-12 of Specification 3.3.3.9.

RADIOACTIVE EFFLUENTS

GAS STORAGE TANKS

LIMITING CONDITION FOR OPERATION

3.11.2.2 The quantity of radioactivity contained in each gas storage tank shall be limited to 43,800 curies noble gas (considered as Xe-133).

APPLICABILITY: **At all times.**

ACTION:

a. **With the quantity of radioactive material in any gas storage tank exceeding the above limit, without delay suspend all additions of radioactive material to the tank and within 48 hours reduce the tank contents to within the limit.**

b. **The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.**

SURVEILLANCE REQUIREMENTS

4.11.2.2 The quantity of radioactive material contained in each gas storage tank shall be determined to be within the above limit at least once per 7 days whenever radioactive materials are added to the tank and at least once per 24 hours during primary coolant system degassing operations, by analysis of the Reactor Coolant System noble gases.

Radiation Monitoring Instrumentation (Continued)

INSTRUMENT	ALARM/TRIP SETPOINT	MEASUREMENT RANGE*
6) Noble Gas Unit Vent Monitors		
a) Low Range (VRS 1505)	See the ODCM	5.8×10^{-7} µCi/cc to 2.7×10^{-2} µCi/cc.
b) Mid Range (VRS 1507)	Not Applicable**	1.3×10^{-3} µCi/cc to $7.5 \times 10^{+2}$ µCi/cc.
c) High Range (VRS 1509)	Not Applicable**	2.9×10^{-2} µCi/cc to $1.6 \times 10^{+4}$ µCi/cc.
7) Gland Steam Condenser Vent Noble Gas Monitor		
a) Low Range (SRA 1805)	See the ODCM	5.8×10^{-7} µCi/cc to 2.7×10^{-2} µCi/cc.
8) Steam Jet Air Ejector Vent Noble Gas Monitor		
a) Low Range (SRA 1905)	See the ODCM	5.8×10^{-7} µCi/cc to 2.7×10^{-2} µCi/cc.
b) Mid Range (SRA 1907)	Not applicable.**	1.3×10^{-3} µCi/cc to $7.5 \times 10^{+2}$ µCi/cc.
c) High Range (SRA 1909)	Not Applicable.**	2.9×10^{-2} µCi/cc to $1.6 \times 10^{+4}$ µCi/cc.
9) Spent Fuel Storage (RRC-330)	The monitor setpoint is selected to alarm and trip consistent with 10 CFR 70.24(a) (2)	1×10^{-1} mR/hr to $1 \times 10^{+4}$ mR/hr

* This is the minimum sensitivity of the instrument for normal operation, to follow the course of an accident, and/or take protective actions. Values of the instrument above or below this minimum sensitivity range are acceptable.

** These monitors are used to provide data to assist in post-accident off-site dose assessment.

3/4.3.3.9 EXPLOSIVE GAS MONITORING INSTRUMENTATION

This instrumentation includes provisions for monitoring the concentrations of potentially explosive gas mixtures in the waste gas holdup system. The OPERABILITY and use of this instrumentation is consistent with the requirement of General Design Criteria specified in Section 11.3 of the Final Safety Analysis Report for the Donald C. Cook Nuclear Plant.

3/4.11 RADIOACTIVE EFFLUENTS

BASES

3/4.11.1 LIQUID HOLDUP TANKS

Restricting the quantity of radioactive material contained in the specified tanks provides assurance that in the event of an uncontrolled release of the tanks' contents, the resulting concentrations would be less than the limits of 10 CFR Part 20, Appendix B, Table II, Column 2, at the nearest potable water supply and the nearest surface water supply in an UNRESTRICTED AREA.

This specification, being applicable to outside temporary tanks, does not apply to the refueling water storage tank, primary water storage tank, or the condensate storage tank, since they are a part of the permanent plant design.

3/4.11.2 GASEOUS EFFLUENTS

3/4.11.2.1 EXPLOSIVE GAS MIXTURE

This specification is provided to ensure that the concentration of potentially explosive gas mixtures contained in the waste gas treatment system is maintained below the flammability limits of hydrogen and oxygen mixtures. Maintaining the concentration of hydrogen or oxygen below their flammability limits provides that the releases of radioactive materials will be controlled in conformance with the requirements of the General Design Criterion specified in Section 11.1 of the Final Safety Analysis Report for the Donald C. Cook Nuclear Plant.

3/4.11.2.2 GAS STORAGE TANKS

Restricting the quantity of radioactivity contained in each gas storage tank provides assurance that in the event of an uncontrolled release of the tank's contents, the resulting total body exposure to an individual at the nearest site boundary will not exceed 0.5 rem. This is consistent with Standard Review Plan 15.7.1, "Waste Gas System Failure."

TECHNICAL REVIEW AND CONTROL (continued)

plan and implementing procedures shall be reviewed pursuant to the requirements of Specifications 6.5.1.6 and 6.5.2.7 and approved by the Plant Manager. NRC approval shall be obtained as appropriate.

g. Recommended changes to the Security Plan and implementing procedures shall be reviewed pursuant to the requirements of Specifications 6.5.1.6 and 6.5.2.7 and approved by the Plant Manager. NRC approval shall be obtained as appropriate.

6.5.3.2 Records of the above activities shall be provided to the Plant Manager, PNSRC and/or the NSDRC as necessary for required reviews.

6.6 REPORTABLE EVENT ACTION

6.6.1 The following actions shall be taken for REPORTABLE EVENTS:

a. The Commission shall be notified and a report submitted pursuant to the requirements of 10 CFR 50.73, and

b. Each REPORTABLE EVENT shall be reviewed by the PNSRC, and the results of this review shall be submitted to the NSDRC and the Vice President - Nuclear Operations.

6.7 SAFETY LIMIT VIOLATION

6.7.1 The following actions shall be taken in the event a safety limit is violated:

a. The NRC Operations Center shall be notified by telephone as soon as possible and in all cases within 1 hour. The Chairman of the NSDRC shall be notified within 24 hours.

b. A Safety Limit Violation Report shall be prepared. The report shall be reviewed by the PNSRC. This report shall describe (1) applicable circumstances preceding the violation; (2) effects of the violation upon facility components, systems or structures; and (3) corrective action taken to prevent recurrence.

c. The Safety Limit Violation Report shall be submitted to the Commission, the Chairman of the NSDRC and the Vice President Nuclear Operations within 14 days of the violation.

d. Operation of the unit shall not be resumed until authorized by the Commission.

6.8 PROCEDURES AND PROGRAMS

6.8.1 Written procedures shall be established, implemented and maintained covering the activities referenced below:

a. The applicable procedures recommended in Appendix "A" of Regulatory Guide 1.33, Rev. 2, February 1978.

b. Security Plan implementation.

c. Emergency Plan implementation.

d. PROCESS CONTROL PROGRAM implementation.

e. OFFSITE DOSE CALCULATION MANUAL implementation.

f. Quality Assurance Program for effluent and environmental monitoring using the guidance in Regulatory Guide 1.21, Rev. 1, June 1974, and Regulatory Guide 4.1, Rev. 1, April 1975.

6.8.2 Each procedure and administrative policy of Specification 6.8.1 above, and changes thereto, including temporary changes, shall be reviewed prior to implementation as set forth in Specification 6.5 above.

6.8.3 A plant program for post-accident sampling shall be established, implemented, and maintained which will ensure the capability to obtain and analyze reactor coolant samples, containment atmosphere noble gas samples, and unit vent gaseous effluent samples for iodines and particulates under accident conditions. The program will include the following:

a. Training of personnel,

b. Procedures for sampling and analysis,

c. Provisions for maintenance of sampling and analysis equipment.

6.8 PROCEDURES AND PROGRAMS (continued)

6.8.4 The following programs shall be established, implemented, and maintained:

a. Radioactive Effluent Controls Program

A program shall be provided conforming with 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to MEMBERS OF THE PUBLIC from radioactive effluents as low as reasonably achievable. The program (1) shall be contained in the ODCM, (2) shall be implemented by operating procedures, and (3) shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

1) Limitations on the operability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM,

2) Limitations on the concentrations of radioactive material released in liquid effluents to UNRESTRICTED AREAS conforming to 10 CFR Part 20, Appendix B, Table II, Column 2,

3) Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.106 and with the methodology and parameters in the ODCM,

4) Limitations on the annual and quarterly doses or dose commitment to a MEMBER OF THE PUBLIC from radioactive materials in liquid effluents released from each unit to UNRESTRICTED AREAS conforming to Appendix I to 10 CFR Part 50,

5) Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days,

6) Limitations on the operability and use of the liquid and gaseous effluent treatment systems to ensure that the appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a 31-day period would exceed 2 percent of the guidelines for the annual dose or dose commitment conforming to Appendix I to 10 CFR Part 50,

6.8 PROCEDURES AND PROGRAMS (continued)

7) Limitations on the dose rate resulting from radioactive material released in gaseous effluents to areas beyond the SITE BOUNDARY conforming to the dose associated with 10 CFR Part 20, Appendix B, Table II, Column 1,

8) Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the SITE BOUNDARY conforming to Appendix I to 10 CFR Part 50,

9) Limitations on the annual and quarterly doses to a MEMBER OF THE PUBLIC from Iodine-131, Iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days in gaseous effluents released from each unit to areas beyond the SITE BOUNDARY conforming to Appendix I to 10CFR Part 50, and

10) Limitations on the annual dose or dose commitment to any MEMBER OF THE PUBLIC due to releases of radioactivity and to radiation from uranium fuel cycle sources conforming to 40 CFR Part 190.

b. Radiological Environmental Monitoring Program

A program shall be provided to monitor the radiation and radionuclides in the environs of the plant. The program shall provide (1) representative measurements of radioactivity in the highest potential exposure pathways, and (2) verification of the accuracy of the effluent monitoring program and modeling of environmental exposure pathways. The program shall (1) be contained in the ODCM, (2) conform to the guidance of Appendix I to 10 CFR Part 50, and (3) include the following:

1) Monitoring, sampling, analysis, and reporting of radiation and radionuclides in the environment in accordance with the methodology and parameters in the ODCM,

2) A Land Use Census to ensure that changes in the use of areas at and beyond the SITE BOUNDARY are identified and that modifications to the monitoring program are made if required by the results of this census, and

3) Participation in a Interlaboratory Comparison Program to ensure that independent checks on the precision and accuracy of the measurements of radioactive materials in environmental sample matrices are performed as part of the quality assurance program for environmental monitoring.

6.9 REPORTING REQUIREMENTS

ROUTINE REPORTS

6.9.1 In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following reports shall be submitted to the Regional Administrator unless otherwise noted.

STARTUP REPORT

6.9.1.1 A summary report of plant startup and power escalation testing shall be submitted following (1) receipt of an operating license, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the plant.

6.9.1.2 The startup report shall address each of the tests identified in the FSAR and shall include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described. Any additional specific details required in license conditions based on other commitments shall be included in this report.

STARTUP REPORT (continued)

6.9.1.3 Startup reports shall be submitted within (1) 90 days following completion of the startup test program, (2) 90 days following resumption or commencement of commercial power operation, or (3) 9 months following initial criticality, whichever is earliest. If the Startup Report does not cover all three events (i.e., initial criticality, completion of startup test program, and resumption or commencement of commercial power operation), supplementary reports shall be submitted at least every three months until all three events have been completed.

ANNUAL REPORTS[1]

6.9.1.4 Annual reports covering the activities of the unit as described below for the previous calendar year shall be submitted prior to March 1 of each year. The initial report shall be submitted prior to March 1 of the year following initial criticality.

6.9.1.5 Reports required on an annual basis shall include:

a. A tabulation on an annual basis of the number of station, utility and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated man rem exposure according to work and job functions[2], e.g., reactor operations and surveillance, in-service inspection, routine maintenance, special maintenance (describe maintenance), waste processing and refueling. The dose assignment to various duty functions may be estimates based on pocket dosimeter, TLD, or film badge measurements. Small exposures totalling less than 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources shall be assigned to specific major work functions.

b. The complete results of steam generator tube in-service inspections performed during the report period (reference Specification 4.4.5.5.b).

c. Documentation of all challenges to the pressurizer power operated relief valves (PORVs) or safety valves.

d. Information regarding any instances when the I-131 specific activity limit was exceeded.

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1 A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station.

2 This tabulation supplements the requirements of 20.407 of 10 CFR Part 20.

ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT[3]

6.9.1.6 The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted before May 1 of each year. The report shall include summaries, interpretations, and analysis of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in (1) the ODCM and (2) Sections IV.B.2, IV.B.3, and IV.C of Appendix I to 10 CFR Part 50.

ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT[3]

6.9.1.7 The Annual Radioactive Effluent Release Report covering the operation of the unit during the previous 12 months of operations shall be submitted within 90 days after January 1 of each year. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit. The material provided shall be (1) consistent with the objectives outlined in the ODCM and PCP and (2) in conformance with 10 CFR 50.36a and Section IV.B.1 of Appendix I to 10 CFR Part 50.

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3 A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station;however, for units with separate radwaste systems, the submittal shall specify the releases of radioactive material for each unit.

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MONTHLY REACTOR OPERATING REPORT

6.9.1.8 Routine reports of operating statistics and shutdown experience, including documentation of all challenges to the PORVs or safety valves, shall be submitted on a monthly basis to the U.S. Nuclear Regulatory Commission (Attn: Document Control Desk), Washington, D.C. 20555, with a copy to the Regional Office no later than the 15th of each month following the calendar month covered by the report.

CORE OPERATING LIMITS REPORT

6.9.1.9.1 Core operating limits shall be established and documented in the CORE OPERATING LIMITS REPORT before each reload cycle or any remaining part of a reload cycle for the following:

a. Moderator Temperature Coefficient Limits for Specification 3/4.1.1.4,

b. Rod Drop Time Limits for Specification 3/4.1.3.3,

c. Shutdown Rod Insertion Limits for Specification 3/4.1.3.4,

d. Control Rod Insertion Limits for Specification 3/4.1.3.5,

e. Axial Flux Difference for Specification 3/4.2.1,

f. Heat Flux Hot Channel Factor for Specification 3/4.2.2,

g. Nuclear Enthalpy Rise Hot Channel Factor for Specification 3/4.2.3, and

h. Allowable Power Level for Specification 3/4.2.6.

6.9.1.9.2 The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC in:

a. WCAP-9272-P-A, "Westinghouse Reload Safety Evaluation Methodology," July 1985 (Westinghouse Proprietary),

b. WCAP-8385, "Power Distribution Control and Load Following Procedures - Topical Report," September 1974 (Westinghouse Proprietary),

c. WCAP-10216-P-A, Part B, "Relaxation of Constant Axial Offset Control/F_Q Surveillance Technical Specification," June 1983 (Westinghouse Proprietary),

d. WCAP-10266-P-A Rev. 2, "The 1981 Version of Westinghouse Evaluation Mode Using BASH Code," March 1987 (Westinghouse Proprietary).

CORE OPERATING LIMITS REPORT (Continued)

6.9.1.9.3 The core operating limits shall be determined so that all applicable limits (e.g., fuel thermal-mechanical limits, core thermal-hydraulic limits, ECCS limits, nuclear limits such as shutdown margin, and transient and accident analysis limits) of the safety analysis are met.

6.9.1.9.4 The CORE OPERATING LIMITS REPORT, including any mid-cycle revisions or supplements thereto, shall be provided upon issuance, for each reload cycle, to the NRC document control desk with copies to the Regional Administrator and Resident Inspector.

SPECIAL REPORTS

6.9.2 Special reports shall be submitted to the attention of the document control desk - U.S. Nuclear Regulatory Commission (Washington, D.C. 20555), with copies to the Region III Administrator and the Resident Inspector at the Cook Nuclear Plant within the time period specified for each report. These reports shall be submitted covering the activities identified below pursuant to the requirements of the applicable reference specification:

a. Inoperable Seismic Monitoring Instrumentation, Specification 3.3.3.3.

b. Seismic Monitoring Instrumentation Actuated, Specification 4.3.3.3.2.

c. Inoperable Meteorological Monitoring Instrumentation, Specification 3.3.3.4.

d. High Specific Activity in RCS Coolant, Specification 3.4.8.

e. RCS Pressure Transient Mitigated By RHR Safety Valve or RCS Vent(s), Specification 3.4.9.3.

f. Moderator Temperature Coefficient, Specification 3.1.1.4.

g. Sealed Source Leakage in Excess of Limits, Specification 4.7.7.1.3.

h. ECCS Actuation, Specifications 3.5.2 and 3.5.3.

i. Violation of Safety Limit, Specification 6.7.1.

6.10 RECORD RETENTION

6.10.1 The following records shall be retained for at least five years:

a. Records and logs of unit operation covering time interval at each power level.

b. Records and logs of principal maintenance activities, inspections, repair and replacement of principal items of equipment related to nuclear safety.

c. All REPORTABLE EVENTS submitted to the Commission.

d. Records of surveillance activities, inspections and calibrations required by these Technical Specifications.

e. Records of changes made to the procedures required by Specification 6.8.1.

f. Records of sealed source and fission detection leak tests and results.

g. Records of annual physical inventory of all sealed source material on record.

RECORD RETENTION (Continued)

6.10.2 The following records shall be retained for the duration of the Facility Operating License:

a. Records and drawing changes reflecting unit design modifications made to systems and equipment described in the Final Safety Analysis Report.

b. Records of new and irradiated fuel inventory, fuel transfers and assembly burnup histories.

c. Records of radiation exposure for all individuals entering radiation control areas.

d. Records of gaseous and liquid radioactive material released to the environment.

e. Records of transient or operational cycles for those facility components identified in Table 5.9-1.

f. Records of reactor tests and experiments.

g. Records of training and qualification for current members of the Plant Staff.

h. Records of in-service inspections performed pursuant to these Technical Specifications.

i. Records of Quality Assurance activities required by the QA Manual.

j. Records of reviews performed for changes made to procedures or equipment or review of tests and experiments pursuant to 10 CFR 50.59.

k. Records of meetings of the PNSRC and the NSDRC.

l. Records of radioactive shipments.

m. Records of the service lives of hydraulic snubbers including the date at which service life commences and associated installation and maintenance records.

n. Records of reviews performed for changes made to the OFFSITE DOSE CALCULATION MANUAL and the PROCESS CONTROL PROGRAM.

6.11 RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

6.12 HIGH RADIATION AREA

6.12.1 In lieu of the "control device" or "alarm signal" required by paragraph 20.203(c)(2) of 10 CFR 20, each high radiation area in which the intensity of radiation is 1000 mrem/hr or less shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit*. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.

b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made aware of it.

c. An individual qualified in radiation protection procedures who is equipped with a radiation dose rate monitoring device. This individual shall be responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility Health Physicist in the Radiation Work Permit.

6.12.2 The requirements of 6.12.1 shall also apply to each high radiation area in which the intensity of radiation is greater than 1000mrem/hr. When possible, locked doors shall be provided to prevent unauthorized entry into such areas, and the keys shall be maintained under the administrative control of the Shift Supervisor on duty and/or the Plant Health Physicist (Plant Radiation Protection Supervisor). Doors shall remain locked except during periods of access by personnel under an approved RWP which shall specify the dose rate levels in the immediate work areas. In the event that it is not possible or practicable to provide locked doors due to area size or configuration, the area shall be roped off, conspicuously posted and a flashing light shall be activated as a warning device.

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* Health Physics (Radiation Protection) personnel shall be exempt from the RWP issuance requirement during the performance of their assigned radiation protection duties, provided they comply with approved radiation protection procedures for entry into high radiation areas.

6.13 PROCESS CONTROL PROGRAM (PCP)

6.13.1 Changes to the PCP:

a. Shall be documented and records of reviews performed shall be retained as required by Specification 6.10.2.n. This documentation shall contain:

1. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and

2. A determination that the change will maintain the overall conformance of the solidified waste product to existing requirements of Federal, State, or other applicable regulations.

b. Shall become effective after review and acceptance by the PNSRC and the approval of the Plant Manager.

6.14 OFFSITE DOSE CALCULATION MANUAL (ODCM)

6.14.1 Changes to the ODCM:

a. Shall be documented and records of reviews performed shall be retained as required by Specification 6.10.2.n. This documentation shall contain:

1. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and

2. A determination that the change will maintain the level of radioactive effluent control required by 10 CFR 20.106, 40 CFR Part 190, 10 CFR 50.36a, and Appendix I to 10 CFR Part 50 and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations.

b. Shall become effective after review and acceptance by the PNSRC and the approval of the Plant Manager.

c. Shall be submitted to the Commission in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Annual Radioactive Effluent Release Report for the period of the report in which any change to the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (e.g., month/year) the change was implemented.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

INDIANA MICHIGAN POWER COMPANY

DOCKET NO. 50-316

DONALD C. COOK NUCLEAR PLANT, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 175
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 August 3, 1994, 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. 175 , 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 issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Kevin A. Connaughton for

John N. Hannon, Director
Project Directorate III-1
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: February 10, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 175

FACILITY OPERATING LICENSE NO. DPR-74

DOCKET NO. 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 vertical lines indicating the area of change.

REMOVE	INSERT
II	II
V	V
X	X
XI	XI
XII	XII
XIII	XIII
XIV	XIV
XV	XV
XVI	XVI
XVII	XVII
XVIII	-
1-6	1-6
1-7	1-7
3/4 3-35	3/4 3-35
3/4 3-35a	3/4 3-35a
3/4 3-35b	-
3/4 3-37	3/4 3-37
3/4 3-37a	3/4 3-37a
3/4 3-37b	-
3/4 3-53	3/4 3-53
3/4 3-54	3/4 3-54
3/4 3-55	3/4 3-55
3/4 3-56	3/4 3-56
3/4 3-57	3/4 3-57
3/4 3-58	-
3/4 3-59	-
3/4 3-60	-
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3/4 3-62	-
3/4 3-63	-
3/4 3-64	-
3/4 3-65	-
3/4 3-66	-
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3/4 12-3	-
3/4 12-4	-
3/4 12-4a	-
3/4 12-5	-
3/4 12-6	-
3/4 12-7	-
3/4 12-8	-
3/4 12-9	-
3/4 12-10	-
B 3/4 3-1c	B 3/4 3-1c
B 3/4 3-3	B 3/4 3-3
B 3/4 3-4	-
B 3/4 11-1	B 3/4 11-1
B 3/4 11-2	-
B 3/4 11-3	-
B 3/4 11-4	-
B 3/4 11-5	-
B 3/4 12-1	-
6-12	6-12
6-13	6-13
-	6-13a
-	6-13b
-	6-13c
6-14	6-14
6-15	6-15
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DEFINITIONS

SECTION PAGE

1.0 DEFINITIONS

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ADMINISTRATIVE CONTROLS

PHYSICS TESTS

1.25 PHYSICS TESTS shall be those tests performed to measure the fundamental nuclear characteristics of the reactor core and related instrumentation and 1) described in Chapter 13.0 of the FSAR, 2) authorized under the provisions of 10 CFR 50.59, or 3) otherwise approved by the Commission.

$\bar{E}$ - AVERAGE DISINTEGRATION ENERGY

1.26 $\bar{E}$ shall be the average (weighted in proportion to the concentration of each radionuclide in the reactor coolant at the time of sampling) of the sum of the average beta and gamma energies per disintegration (in MeV) for isotopes, other than iodines, with half lives greater than 15 minutes, making up at least 95% of the total non-iodine activity in the coolant.

SOURCE CHECK

1.27 A SOURCE CHECK shall be the qualitative assessment of Channel response when the Channel sensor is exposed to a radioactive source.

PROCESS CONTROL PROGRAM (PCP)

1.28 The PROCESS CONTROL PROGRAM (PCP) shall contain the current formulas, sampling, analyses, tests, and determinations to be made to ensure that processing and packaging of solid radioactive wastes based on demonstrated processing of actual or simulated wet solid wastes will be accomplished in such a way as to assure compliance with 10 CFR Parts 20, 61, and 71, State regulations, burial ground requirements, and other requirements governing the disposal of solid radioactive waste.

DEFINITIONS

1.29 Deleted.

OFFSITE DOSE CALCULATION MANUAL (ODCM)

1.30 The OFFSITE DOSE CALCULATION MANUAL (ODCM) shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm/trip setpoints, and in the conduct of the Environmental Radiological Monitoring Program. The ODCM shall contain (1) the Radioactive Effluent Controls and Radiological Environmental Monitoring Programs required by Section 6.8.4 and (2) descriptions of the information that should be included in the Annual Radiological Environmental Operating and Annual Radioactive Effluent Release Reports required by Specifications 6.9.1.6 and 6.9.1.7.

GASEOUS RADWASTE TREATMENT SYSTEM

1.31 A GASEOUS RADWASTE TREATMENT SYSTEM is any system designed and installed to reduce radioactive gaseous effluents by collecting primary coolant system off-gases from the primary system and providing for delay or holdup for the purpose of reducing the total radioactivity prior to release to the environment.

VENTILATION EXHAUST TREATMENT SYSTEM

1.32 A VENTILATION EXHAUST TREATMENT SYSTEM is any system designed and installed to reduce gaseous radioiodine or radioactive material in particulate form in effluents by passing ventilation or vent exhaust gases through charcoal absorbers and/or HEPA filters for the purpose of removing iodines or particulates from the gaseous exhaust stream prior to the release to the environment. Such a system is not considered to have any effect on noble gas effluents. Engineered Safety Feature (ESF) atmospheric cleanup systems are not considered to be VENTILATION EXHAUST TREATMENT SYSTEM components.

PURGE-PURGING

1.33 PURGE or PURGING is the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration or other operating condition, in such a manner that replacement air or gas is required to purify the confinement.

VENTING

1.34 VENTING is the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration or other operating condition, in such a manner that replacement air or gas is not provided or required during VENTING. Vent, used in system names, does not imply a VENTING process.

TABLE 3.3-6
RADIATION MONITORING INSTRUMENTATION
(OPERABILITY BASES DISCUSSED IN BASES SECTION 3/4 3.3.1)

OPERATION MODE/INSTRUMENT	MINIMUM CHANNELS OPERABLE	ALARM SETPOINT	TRIP SETPOINT	ACTION
1. Modes 1, 2, 3 & 4				
A. Area Monitors				
i. Upper Containment+ (VRS 2101/2201)	1	N/A	≤ 54 mR/hr	21
ii. Containment High Range (VRA 2310/2410)	2	≤ 10R/hr	N/A	22A
B. Process Monitors				
i. Particulate Channel+ (ERS 2301/2401)	1	N/A	≤ 2.52 μCi	20
ii. Noble Gas Channel+ (ERS 2305/2405)	1	N/A	≤ 4.4×10^{-3} $\frac{\mu Ci}{cc}$	20
C. Noble Gas Effluent Monitors				
i. Unit Vent Effluent Monitors				
a. Low Range (VRS 2505)	----------(see the ODCM)----------			
b. Mid Range (VRS 2507)	1	N/A	N/A	22B
c. High Range (VRS 2509)	1	N/A	N/A	22B
ii. Steam Generator PORV				
a. MRA 2601 (Loop 1)	1	N/A	N/A	22B
b. MRA 2602 (Loop 4)	1	N/A	N/A	22B
c. MRA 2701 (Loop 2)	1	N/A	N/A	22B
d. MRA 2702 (Loop 3)	1	N/A	N/A	22B
iii. Gland Steam Condenser Vent Monitor				
a. Low Range (SRA 2805)	----------(see the ODCM)----------			
iv. Steam Jet Air Ejector Vent Monitors				
a. Low Range (SRA 2905)	----------(see the ODCM)----------			
b. Mid Range (SRA 2907)	1	N/A	N/A	22B
c. High Range (SRA 2909)	1	N/A	N/A	22B

TABLE 3.3-6 (Continued)
RADIATION MONITORING INSTRUMENTATION
(OPERABILITY BASES DISCUSSED IN BASES SECTION 3/4 3.3.1)

OPERATION MODE/INSTRUMENT	MINIMUM CHANNELS OPERABLE	ALARM SETPOINT	TRIP SETPOINT	ACTION
2. Mode 6				
A. Train A	any 2/3 channels			22
i. Containment Area+ Radiation Channel (VRS 2101)		N/A	≤ 54 mR/hr	
ii. Particulate Channel+ (ERS 2301)		N/A	≤ 2.52 μCi	
iii. Noble Gas Channel+ (ERS 2305)		N/A	$\leq 4.4\times10^{-3}$ $\frac{\mu Ci}{cc}$	
B. Train B	any 2/3 channels			22
i. Containment Area+ Radiation Channel (VRS 2201)		N/A	≤ 54 mR/hr	
ii. Particulate Channel+ (ERS 2401)		N/A	≤ 2.52 μCi	
iii. Noble Gas Channel+ (ERS 2405)		N/A	$\leq 4.4\times10^{-3}$ $\frac{\mu Ci}{cc}$	
3. Mode ***				
A. Spent Fuel Storage (RRC-330)	1	≤ 15 mR/hr	≤ 15 mR/hr	21

*** With fuel in storage pool or building
+ This specification only applies during purge

TABLE 4.3-3

RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

OPERATION MODE/INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	APPLICABLE MODES
1. Modes 1, 2, 3 & 4				
A. Area Monitors				
i. Upper Containment (VRS 2101/2201)	S*	R	Q	1, 2, 3, 4
ii. Containment High Range (VRA 2310/2410)	S	R	Q	1, 2, 3, 4
B. Process Monitors				
i. Particulate Channel (ERS 2301/2401)	S*	R	Q	1, 2, 3, 4
C. Noble Gas Effluent Monitors				
i. Unit Vent Effluent Monitors				
a. Low Range (VRS 2505)	----------(see the ODCM)----------			
b. Mid Range (VRS 2507)	S	R	N/A	1, 2, 3, 4
c. High Range (VRS 2509)	S*	R	N/A	1, 2, 3, 4
ii. Steam Generator PORV				
a. MRA 2601 (Loop 1)	S*	R	Q	1, 2, 3, 4
b. MRA 2602 (Loop 4)	S*	R	Q	1, 2, 3, 4
c. MRA 2701 (Loop 2)	S*	R	Q	1, 2, 3, 4
d. MRA 2702 (Loop 3)	S*	R	Q	1, 2, 3, 4
iii. Gland Steam Condenser Vent Monitor				
a. Low Range (SRA 2805)	----------(see the ODCM)----------			
iv. Steam Jet Air Ejector Vent Monitors				
a. Low Range (SRA 2905)	----------(see the ODCM)----------			
b. Mid Range (SRA 2907)	S	R	Q	1, 2, 3, 4
c. High Range (SRA 2909)	S*	R	N/A	1, 2, 3, 4

TABLE 4.3-3 (Continued)
RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

OPERATION MODE/INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	APPLICABLE MODES
2. Mode 6				
A. Train A				6
i. Containment Area Radiation Channel (VRS 2101)	S*	R	Q	
ii. Particulate Channel (ERS 2301)	S*	R	Q	
iii. Noble Gas Channel (ERS 2305)	S*	R	Q	
B. Train B				6
i. Containment Area Radiation Channel (VRS 2201)	S*	R	Q	
ii. Particulate Channel (ERS 2401)	S*	R	Q	
iii. Noble Gas Channel (ERS 2405)	S*	R	Q	
3. Mode **				
A. Spent Fuel Storage (RRC-330)	S	R	Q	**

* To include SOURCE CHECK per T/S Section 1.27
** With fuel in storage pool or building

INSTRUMENTATION

EXPLOSIVE GAS MONITORING INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.3.9 The explosive gas monitoring instrumentation channels shown in Table 3.3-12 shall be OPERABLE with their alarm/trip setpoints set to ensure that the limits of Specifications 3.11.2.1 are not exceeded.

APPLICABILITY: As shown in Table 3.3-12.

ACTION:

a. With an explosive gas monitoring instrumentation channel alarm/trip setpoint less conservative than the above specification, declare the channel inoperable and take the ACTION shown in Table 3.3-12.

b. With less than the minimum number of explosive gas monitoring instrumentation channels OPERABLE, take the ACTION shown in Table 3.3-12. Restore the inoperable instrumentation to OPERABLE status within 30 days. If unsuccessful, prepare and submit a SPECIAL REPORT to the Commission pursuant to Specification 6.9.2 to explain why this inoperability was not corrected in a timely manner.

c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.9.1 Each explosive gas monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK, CHANNEL CALIBRATION, and analog CHANNEL FUNCTIONAL TEST at the frequencies shown in Table 4.3-8.

TABLE 3.3-12

Explosive Gas Monitoring Instrumentation

Instrument (Instrument #)	Minimum Channels OPERABLE	Applicability	ACTION
1. Waste Gas Holdup System Explosive Gas Monitoring System[1]			
a. Hydrogen Monitor (QC-1400)	1	**	23
b. Oxygen Monitor (QC-1400, QC-370)	2	**	24

ACTION STATEMENTS

Action 23 With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, operation of this system may continue for up to 14 days, provided grab samples are taken and analyzed every 12 hours.

Action 24 With the number of channels OPERABLE one less than required by the Minimum Channels OPERABLE requirement, operation of this system may continue for up to 30 days. With 2 channels inoperable, operation of this system may continue for up to 30 days, provided grab samples are taken and analyzed every 12 hours.

** During waste gas holdup system operation.

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[1] The waste gas holdup system explosive gas monitoring system may be inoperable for up to 160 days on a one-time basis for the purpose of replacing one oxygen monitor. During this time, grab samples for oxygen are to be taken and analyzed every 12 hours.

TABLE 4.3-8

Explosive Gas Monitoring Instrumentation Surveillance Requirements

Instrument (Instrument #)	CHANNEL CHECK	CHANNEL FUNCTIONAL TEST	CHANNEL CALIBRATION	Applicability
1. Waste Gas Holdup System Explosive Gas Monitoring System				
a. Hydrogen Monitor (QC-1400)	D	M	Q(1)	**
b. Oxygen Monitor (QC-1400, QC-370*)	D	M	Q(2)	**

Table Notation

(1) The CHANNEL CALIBRATION shall include the use of standard gas samples containing a nominal:

a. One volume percent hydrogen, balance nitrogen, and

b. Four volume percent hydrogen, balance nitrogen.

(2) The CHANNEL CALIBRATION shall include the use of standard gas samples containing a nominal:

a. One volume percent oxygen, balance nitrogen, and

b. Four volume percent oxygen, balance nitrogen.

** During waste gas holdup system operation.

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* These surveillances are not required during the 160-day period in which this monitor is being replaced.

INSTRUMENTATION

3/4.3.4 TURBINE OVERSPEED PROTECTION

LIMITING CONDITION FOR OPERATION

3.3.4.1 At least one turbine overspeed protection system shall be OPERABLE.

APPLICABILITY: MODES 1, 2 and 3

ACTION:

a. With one stop valve or one control valve per high pressure turbine steam lead inoperable or with one reheat stop valve or one reheat intercept valve per low pressure turbine steam lead inoperable, operation may continue for up to 72 hours provided the inoperable valve(s) is restored to OPERABLE status or at least one valve in the affected steam lead is closed; otherwise, isolate the turbine from the steam supply within the next 6 hours.

b. With the above required turbine overspeed protection system otherwise inoperable, within 6 hours either restore the system to OPERABLE status or isolate the turbine from the steam supply.

SURVEILLANCE REQUIREMENTS

4.3.4.1.1 The provisions of Specification 4.0.4 are not applicable.

4.3.4.1.2 The above required turbine overspeed protection system shall be demonstrated OPERABLE:

a. At least once per 7 days by cycling each of the following valves through at least one complete cycle from the running position.

1. Four high pressure turbine stop valves.

2. Four high pressure turbine control valves.

3. Six low pressure turbine reheat stop valves.

4. Six low pressure turbine reheat intercept valves.

SURVEILLANCE REQUIREMENTS (Continued)

b. At least once per 31 days by direct observation of the movement of each of the above valves through one complete cycle from the running position.

c. At least once per 18 months by performance of a CHANNEL CALIBRATION on the turbine overspeed protection systems.

d. At least once per 40 months by disassembling at least one of each of the above valves and performing a visual and surface inspection of valve seats, disks and stems and verifying no unacceptable flaws or corrosion.

3/4.11 RADIOACTIVE EFFLUENTS

LIQUID HOLDUP TANKS*

LIMITING CONDITION FOR OPERATION

3.11.1 The quantity of radioactive material contained in each of the following tanks shall be limited to less than or equal to 10 curies, excluding tritium and dissolved or entrained noble gases.

a. Outside temporary tanks.

APPLICABILITY: At all times.

ACTION:

a. With the quantity of radioactive material in any of the above listed tanks exceeding the above limit, without delay suspend all additions of radioactive material to the tank and within 48 hours reduce the tank contents to within the limit.

b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.1 The quantity of radioactive material contained in each of the above listed tanks shall be determined to be within the above limit by analyzing a representative sample of the tank's contents at least once per 7 days when radioactive materials are being added to the tank.

* Tanks included in this Specifications are those outdoor tanks that are not surrounded by liners, dikes, or walls capable of holding the tanks contents and that do not have tank over flows and surrounding area drains connected to the liquid radwaste treatment system.

RADIOACTIVE EFFLUENTS

3/4.11.2 GASEOUS EFFLUENTS

EXPLOSIVE GAS MIXTURE

LIMITING CONDITION FOR OPERATION

3.11.2.1 The concentration of oxygen in the waste gas holdup system sh
be limited to less than or equal to 3% by volume if the hydrogen in the
system is greater than or equal to 4% by volume.

APPLICABILITY: At all times.

ACTION:

a. With the concentration of oxygen in the waste gas holdup syst
greater than 3% by volume but less than or equal to 4% by vol
and containing greater than or equal to 4% hydrogen, restore
concentration of oxygen to less than or equal to 3% or reduce
hydrogen concentration to less than 4% within 96 hours.

b. With the concentration of oxygen in the waste gas holdup syst
or tank greater than 4% by volume and greater than 4% hydroge
volume without delay suspend all additions of waste gases to
system or tank and reduce the concentration of oxygen to less
than or equal to 3% or the concentration of hydrogen to less
or equal to 4% within 96 hours in the system or tank.

c. The provisions of Specifications 3.0.3 and 3.0.4 are not
applicable.

SURVEILLANCE REQUIREMENTS

4.11.2.1 The concentration of oxygen in the waste gas holdup system sh
be determined to within the above limits by continuously monitoring the
waste gases in the waste gas holdup system with the oxygen monitors
required OPERABLE by Table 3.3-12 of Specification 3.3.3.9.

RADIOACTIVE EFFLUENTS

GAS STORAGE TANKS

LIMITING CONDITION FOR OPERATION

3.11.2.2 The quantity of radioactivity contained in each gas storage t shall be limited to 43,800 curies noble gas (considered as Xe-133).

APPLICABILITY: At all times.

ACTION:

a. With the quantity of radioactive material in any gas storage exceeding the above limit, without delay suspend all additio radioactive material to the tank and within 48 hours reduce tank contents to within the limit.

b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.2.2 The quantity of radioactive material contained in each gas storage tank shall be determined to be within the above limit at least per 7 days whenever radioactive materials are added to the tank and at l once per 24 hours during primary coolant system degassing operations, by analysis of the Reactor Coolant System noble gases.

Radiation Monitoring Instrumentation (Continued)

INSTRUMENT	ALARM/TRIP SETPOINT	MEASUREMENT R E*
6) Noble Gas Unit Vent Monitors		
a) Low Range (VRS 2505)	See the ODCM	5.8×10^{-7} μCi/cc 2.7×10^{-2} μCi/cc.
b) Mid Range (VRS 2507)	Not Applicable**	1.3×10^{-3} μCi/cc $7.5 \times 10^{+2}$ μCi/cc.
c) High Range (VRS 2509)	Not Applicable**	2.9×10^{-2} μCi/cc $1.6 \times 10^{+4}$ μCi/cc.
7) Gland Steam Condenser Vent Noble Gas Monitor		
a) Low Range (SRA 2805)	See the ODCM	5.8×10^{-7} μCi/cc 2.7×10^{-2} μCi/cc.
8) Steam Jet Air Ejector Vent Noble Gas Monitor		
a) Low Range (SRA 2905)	See the ODCM	5.8×10^{-7} μCi/cc 2.7×10^{-2} μCi/cc.
b) Mid Range (SRA 2907)	Not applicable.**	1.3×10^{-3} μCi/cc $7.5 \times 10^{+2}$ μCi/cc.
c) High Range (SRA 2909)	Not Applicable.**	2.9×10^{-2} μCi/cc $1.6 \times 10^{+4}$ μCi/cc.
9) Spent Fuel Storage (RRC-330)	The monitor setpoint is selected to alarm and trip consistent with 10 CFR 70.24(a) (2)	1×10^{-1} mR/hr to $1 \times 10^{+4}$ mR/hr

* This is the minimum sensitivity of the instrument for normal operatio to follow the course of an accident, and/or take protective actions. Values of the instrument above or below this minimum sensitivity rang are acceptable.

** These monitors are used to provide data to assist in post-accident of site dose assessment.

3/4.3.3.6 POST-ACCIDENT INSTRUMENTATION

The OPERABILITY of the post-accident instrumentation ensures that sufficient information is available on selected plant parameters to monit and assess these variables during and following an accident.

3/4.3.3.7 Deleted.

3/4.3.3.8 FIRE DETECTION INSTRUMENTATION

OPERABILITY of the fire detection instrumentation ensures that adequate warning capability is available for the prompt detection of fires. This capability is required in order to detect and locate fires in their early stages. Prompt detection of fires will reduce the potential for damage t safety-related equipment and is an integral element in the overall facili fire protection program.

In the event that a portion of the fire detection instrumentation is inoperable, the establishment of frequent fire patrols in the affected areas is required to provide detection capability until the inoperable instrumentation is restored to OPERABILITY. Use of containment temperatu monitoring is allowed once per hour if containment fire detection is inoperable.

3/4 3.3.9 EXPLOSIVE GAS MONITORING INSTRUMENTATION

This instrumentation includes provisions for monitoring the concentration of potentially explosive gas mixtures in the Waste Gas Holdup System. The OPERABILITY and use of this instrumentation is consistent with the requirements of General Design Criteria specified in Section 11.3 of the Final Safety Analysis Report for the Donald C. Cook Nuclear Plant.

3/4.3.4 TURBINE OVERSPEED PROTECTION

This specification is provided to ensure that the turbine overspeed protection instrumentation and the turbine speed control valves are OPERABLE and will protect the turbine from excessive overspeed. Protection from turbine excessive overspeed is required since excessive overspeed of the turbine could generate potentially damaging missiles which could impact and damage safety related components, equipment or structures.

3/4.11 RADIOACTIVE EFFLUENTS

BASES

3/4.11.1 LIQUID HOLDUP TANKS

Restricting the quantity of radioactive material contained in the specified tanks provides assurance that in the event of an uncontrolled release of the tanks' contents, the resulting concentrations would be less than the limits of 10 CFR Part 20, Appendix B, Table II, Column 2, at the nearest potable water supply and the nearest surface water supply in an UNRESTRICTED AREA.

This specification, being applicable to outside temporary tanks, does not apply to the refueling water storage tank, primary water storage tank, or the condensate storage tank, since they are a part of the permanent plant design.

3/4 11.2 GASEOUS EFFLUENTS

3/4.11.2.1 EXPLOSIVE GAS MIXTURE

This specification is provided to ensure that the concentration of potentially explosive gas mixtures contained in the waste gas treatment system is maintained below the flammability limits of hydrogen and oxygen mixtures. Maintaining the concentration of hydrogen or oxygen below their flammability limits provides that the releases of radioactive materials will be controlled in conformance with the requirements of the General Design Criterion specified in Section 11.1 of the Final Safety Analysis Report for the Donald C. Cook Nuclear Plant.

3/4.11.2.2 GAS STORAGE TANKS

Restricting the quantity of radioactivity contained in each gas storage tank provides assurance that in the event of an uncontrolled release of the tank's contents, the resulting total body exposure to an individual at the nearest site boundary will not exceed 0.5 rem. This is consistent with Standard Review Plan 15.7.1, "Waste Gas System Failure."

TECHNICAL REVIEW AND CONTROL (continued)

plan and implementing procedures shall be reviewed pursuant to the requirements of Specifications 6.5.1.6 and 6.5.2.7 and approved by the Plant Manager. NRC approval shall be obtained as appropriate.

g. Recommended changes to the Security Plan and implementing procedures shall be reviewed pursuant to the requirements of Specifications 6.5.1.6 and 6.5.2.7 and approved by the Plant Manager. NRC approval shall be obtained as appropriate.

6.5.3.2 Records of the above activities shall be provided to the Plant Manager, PNSRC and/or the NSDRC as necessary for required reviews.

6.6 REPORTABLE EVENT ACTION

6.6.1 The following actions shall be taken for REPORTABLE EVENTS:

a. The Commission shall be notified and a report submitted pursuant to the requirements of 10 CFR 50.73, and

b. Each REPORTABLE EVENT shall be reviewed by the PNSRC, and the results of this review shall be submitted to the NSDRC and the Vice President - Nuclear Operations.

6.7 SAFETY LIMIT VIOLATION

6.7.1 The following actions shall be taken in the event a safety limit is violated:

a. The NRC Operations Center shall be notified by telephone as soon as possible and in all cases within 1 hour. The Chairman of the NSDRC shall be notified within 24 hours.

b. A Safety Limit Violation Report shall be prepared. The report shall be reviewed by the PNSRC. This report shall describe (1) applicable circumstances preceding the violation; (2) effects of the violation upon facility components, systems or structures; and (3) corrective action taken to prevent recurrence.

c. The Safety Limit Violation Report shall be submitted to the Commission, the Chairman of the NSDRC and the Vice President - Nuclear Operations within 14 days of the violation.

d. Operation of the unit shall not be resumed until authorized by the Commission.

6.8 PROCEDURES AND PROGRAMS

6.8.1 Written procedures shall be established, implemented and maintained covering the activities referenced below:

a. The applicable procedures recommended in Appendix "A" of Regulatory Guide 1.33, Rev. 2, February 1978.

b. Security Plan implementation.

c. Emergency Plan implementation.

d. PROCESS CONTROL PROGRAM implementation.

e. OFFSITE DOSE CALCULATION MANUAL implementation.

f. Quality Assurance Program for effluent and environmental monitoring using the guidance in Regulatory Guide 1.21, Rev. 1, June 1974, and Regulatory Guide 4.1, Rev. 1, April 1975.

6.8.2 Each procedure and administrative policy of Specification 6.8.1 above, and changes thereto, including temporary changes, shall be reviewed prior to implementation as set forth in Specification 6.5 above.

6.8.3 A plant program for post-accident sampling shall be established, implemented, and maintained which will ensure the capability to obtain and analyze reactor coolant samples, containment atmosphere noble gas samples, and unit vent gaseous effluent samples for iodines and particulates under accident conditions. The program will include the following:

a. Training of personnel,

b. Procedures for sampling and analysis,

c. Provisions for maintenance of sampling and analysis equipment.

PROCEDURES AND PROGRAMS (continued)

6.8.4 The following programs shall be established, implemented, and maintained:

a. Radioactive Effluent Controls Program

A program shall be provided conforming with 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to MEMBERS OF THE PUBLIC from radioactive effluents as low as reasonably achievable. The program (1) shall be contained in the ODCM, (2) shall be implemented by operating procedures, and (3) shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

1) Limitations on the operability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM,

2) Limitations on the concentrations of radioactive material released in liquid effluents to UNRESTRICTED AREAS conforming to 10 CFR Part 20, Appendix B, Table II, Column 2,

3) Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.106 and with the methodology and parameters in the ODCM,

4) Limitations on the annual and quarterly doses or dose commitment to a MEMBER OF THE PUBLIC from radioactive materials in liquid effluents released from each unit to UNRESTRICTED AREAS conforming to Appendix I to 10 CFR Part 50,

5) Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days,

6) Limitations on the operability and use of the liquid and gaseous effluent treatment systems to ensure that the appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a 31-day period would exceed 2 percent of the guidelines for the annual dose or dose commitment conforming to Appendix I to 10 CFR Part 50,

PROCEDURES AND PROGRAMS (continued)

7) Limitations on the dose rate resulting from radioactive material released in gaseous effluents to areas beyond the SITE BOUNDARY conforming to the dose associated with 10 CFR Part 20, Appendix B, Table II, Column 1,

8) Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the SITE BOUNDARY conforming to Appendix I to 10 CFR Part 50,

9) Limitations on the annual and quarterly doses to a MEMBER OF THE PUBLIC from Iodine-131, Iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days in gaseous effluents released from each unit to areas beyond the SITE BOUNDARY conforming to Appendix I to 10CFR Part 50, and

10) Limitations on the annual dose or dose commitment to any MEMBER OF THE PUBLIC due to releases of radioactivity and to radiation from uranium fuel cycle sources conforming to 40 CFR Part 190.

b. Radiological Environmental Monitoring Program

A program shall be provided to monitor the radiation and radionuclides in the environs of the plant. The program shall provide (1) representative measurements of radioactivity in the highest potential exposure pathways, and (2) verification of the accuracy of the effluent monitoring program and modeling of environmental exposure pathways. The program shall (1) be contained in the ODCM, (2) conform to the guidance of Appendix I to 10 CFR Part 50, and (3) include the following:

1) Monitoring, sampling, analysis, and reporting of radiation and radionuclides in the environment in accordance with the methodology and parameters in the ODCM,

2) A Land Use Census to ensure that changes in the use of areas at and beyond the SITE BOUNDARY are identified and that modifications to the monitoring program are made if required by the results of this census, and

3) Participation in a Interlaboratory Comparison Program to ensure that independent checks on the precision and accuracy of the measurements of radioactive materials in environmental sample matrices are performed as part of the quality assurance program for environmental monitoring.

6.9 REPORTING REQUIREMENTS

ROUTINE REPORTS

6.9.1 In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following reports shall be submitted to the Regional Administrator unless otherwise noted.

STARTUP REPORT

6.9.1.1 A summary report of plant startup and power escalation testing shall be submitted following (1) receipt of an operating license, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the plant.

6.9.1.2 The startup report shall address each of the tests identified in the FSAR and shall include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described. Any additional specific details required in license conditions based on other commitments shall be included in this report.

STARTUP REPORT (continued)

6.9.1.3 Startup reports shall be submitted within (1) 90 days following completion of the startup test program, (2) 90 days following resumption or commencement of commercial power operation, or (3) 9 months following initial criticality, whichever is earliest. If the Startup Report does not cover all three events (i.e., initial criticality, completion of startup test program, and resumption or commencement of commercial power operation), supplementary reports shall be submitted at least every three months until all three events have been completed.

ANNUAL REPORTS[1]

6.9.1.4 Annual reports covering the activities of the unit as described below for the previous calendar year shall be submitted prior to March 1 of each year. The initial report shall be submitted prior to March 1 of the year following initial criticality.

6.9.1.5 Reports required on an annual basis shall include:

a. A tabulation on an annual basis of the number of station, utility and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated man rem exposure according to work and job functions[2], e.g., reactor operations and surveillance, in-service inspection, routine maintenance, special maintenance (describe maintenance), waste processing and refueling. The dose assignment to various duty functions may be estimates based on pocket dosimeter, TLD, or film badge measurements. Small exposures totalling less than 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources shall be assigned to specific major work functions.

b. The complete results of steam generator tube in-service inspections performed during the report period (reference Specification 4.4.5.5.b).

c. Documentation of all challenges to the pressurizer power operated relief valves (PORVs) or safety valves.

d. Information regarding any instances when the I-131 specific activity limit was exceeded.

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1 A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station.

2 This tabulation supplements the requirements of 20.407 of 10 CFR Part 20.

ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT[3]

6.9.1.6 The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted before May 1 of each year. The report shall include summaries, interpretations, and analysis of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in (1) the ODCM and (2) Sections IV.B.2, IV.B.3, and IV.C of Appendix I to 10 CFR Part 50.

ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT[3]

6.9.1.7 The Annual Radioactive Effluent Release Report covering the operation of the unit during the previous 12 months of operations shall be submitted within 90 days after January 1 of each year. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit. The material provided shall be (1) consistent with the objectives outlined in the ODCM and PCP and (2) in conformance with 10 CFR 50.36a and Section IV.B.1 of Appendix I to 10 CFR Part 50.

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[3] A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station;however, for units with separate radwaste systems, the submittal shall specify the releases of radioactive material for each unit.

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MONTHLY REACTOR OPERATING REPORT

6.9.1.8 Routine reports of operating statistics and shutdown experience, including documentation of all challenges to the PORVs or safety valves, shall be submitted on a monthly basis to the U.S. Nuclear Regulatory Commission (Attn: Document Control Desk), Washington, D.C. 20555, with a copy to the Regional Office no later than the 15th of each month following the calendar month covered by the report.

CORE OPERATING LIMITS REPORT

6.9.1.9.1 Core operating limits shall be established and documented in the CORE OPERATING LIMITS REPORT before each reload cycle or any remaining part of a reload cycle for the following:

a. Moderator Temperature Coefficient Limits for Specification 3/4.1.1.4,

b. Rod Drop Time Limits for Specification 3/4.1.3.4,

c. Shutdown Rod Insertion Limits for Specification 3/4.1.3.5,

d. Control Rod Insertion Limits for Specification 3/4.1.3.6,

e. Axial Flux Difference for Specification 3/4.2.1,

f. Heat Flux Hot Channel Factor for Specification 3/4.2.2,

g. Nuclear Enthalpy Rise Hot Channel Factor for Specification 3/4.2.3, and

h. Allowable Power Level for Specification 3/4.2.6.

6.9.1.9.2 The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC in:

a. WCAP-9272-P-A, "Westinghouse Reload Safety Evaluation Methodology," July 1985 (Westinghouse Proprietary),

b. WCAP-8385, "Power Distribution Control and Load Following Procedures - Topical Report," September 1974 (Westinghouse Proprietary),

c. WCAP-10216-P-A, Part B, "Relaxation of Constant Axial Offset Control/F_Q Surveillance Technical Specification," June 1983 (Westinghouse Proprietary),

d. WCAP-10266-P-A Rev. 2, "The 1981 Version of Westinghouse Evaluation Mode Using BASH Code," March 1987 (Westinghouse Proprietary).

CORE OPERATING LIMITS REPORT (Continued)

6.9.1.9.3 The core operating limits shall be determined so that all applicable limits (e.g., fuel thermal-mechanical limits, core thermal-hydraulic limits, ECCS limits, nuclear limits such as shutdown margin, and transient and accident analysis limits) of the safety analysis are met.

6.9.1.9.4 The CORE OPERATING LIMITS REPORT, including any mid-cycle revisions or supplements thereto, shall be provided upon issuance, for each reload cycle, to the NRC document control desk with copies to the Regional Administrator and Resident Inspector.

SPECIAL REPORTS

6.9.2 Special reports shall be submitted to the attention of the document control desk - U.S. Nuclear Regulatory Commission (Washington, D.C. 20555), with copies to the Region III Administrator and the Resident Inspector at the Cook Nuclear Plant within the time period specified for each report. These reports shall be submitted covering the activities identified below pursuant to the requirements of the applicable reference specification:

a. Inoperable Seismic Monitoring Instrumentation, Specification 3.3.3.3.

b. Seismic Monitoring Instrumentation Actuated, Specification 4.3.3.3.2.

c. Inoperable Meteorological Monitoring Instrumentation, Specification 3.3.3.4.

d. High Specific Activity in RCS Coolant, Specification 3.4.8.

e. RCS Pressure Transient Mitigated By RHR Safety Valve or RCS Vent(s), Specification 3.4.9.3.

f. Moderator Temperature Coefficient, Specification 3.1.1.4.

g. Sealed Source Leakage in Excess of Limits, Specification 4.7.7.1.3.

h. ECCS Actuation, Specifications 3.5.2 and 3.5.3.

i. Violation of Safety Limit, Specification 6.7.1.

6.10 RECORD RETENTION

6.10.1 The following records shall be retained for at least five years:

a. Records and logs of unit operation covering time interval at each power level.

b. Records and logs of principal maintenance activities, inspections, repair and replacement of principal items of equipment related to nuclear safety.

c. All REPORTABLE EVENTS submitted to the Commission.

d. Records of surveillance activities, inspections and calibrations required by these Technical Specifications.

e. Records of changes made to the procedures required by Specification 6.8.1.

f. Records of sealed source and fission detection leak tests and results.

g. Records of annual physical inventory of all sealed source material on record.

RECORD RETENTION (Continued)

6.10.2 The following records shall be retained for the duration of the Facility Operating License:

a. Records and drawing changes reflecting unit design modifications made to systems and equipment described in the Final Safety Analysis Report.

b. Records of new and irradiated fuel inventory, fuel transfers and assembly burnup histories.

c. Records of radiation exposure for all individuals entering radiation control areas.

d. Records of gaseous and liquid radioactive material released to the environment.

e. Records of transient or operational cycles for those facility components identified in Table 5.7-1.

f. Records of reactor tests and experiments.

g. Records of training and qualification for current members of the Plant Staff.

h. Records of in-service inspections performed pursuant to these Technical Specifications.

i. Records of Quality Assurance activities required by the QA Manual.

j. Records of reviews performed for changes made to procedures or equipment or review of tests and experiments pursuant to 10 CFR 50.59.

k. Records of meetings of the PNSRC and the NSDRC.

l. Records of radioactive shipments.

m. Records of the service lives of hydraulic snubbers including the date at which service life commences and associated installation and maintenance records.

n. Records of reviews performed for changes made to the OFFSITE DOSE CALCULATION MANUAL and the PROCESS CONTROL PROGRAM.

6.11 RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

6.12 HIGH RADIATION AREA

6.12.1 In lieu of the "control device" or "alarm signal" required by paragraph 20.203(c)(2) of 10 CFR 20, each high radiation area in which the intensity of radiation is 1000 mrem/hr or less shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit*. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.

b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made aware of it.

c. An individual qualified in radiation protection procedures who is equipped with a radiation dose rate monitoring device. This individual shall be responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility Health Physicist in the Radiation Work Permit.

6.12.2 The requirements of 6.12.1 shall also apply to each high radiation area in which the intensity of radiation is greater than 1000mrem/hr. When possible, locked doors shall be provided to prevent unauthorized entry into such areas, and the keys shall be maintained under the administrative control of the Shift Supervisor on duty and/or the Plant Health Physicist (Plant Radiation Protection Supervisor). Doors shall remain locked except during periods of access by personnel under an approved RWP which shall specify the dose rate levels in the immediate work areas. In the event that it is not possible or practicable to provide locked doors due to area size or configuration, the area shall be roped off, conspicuously posted and a flashing light shall be activated as a warning device.

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* Health Physics (Radiation Protection) personnel shall be exempt from the RWP issuance requirement during the performance of their assigned radiation protection duties, provided they comply with approved radiation protection procedures for entry into high radiation areas.

6.13 PROCESS CONTROL PROGRAM (PCP)

6.13.1 Changes to the PCP:

a. Shall be documented and records of reviews performed shall be retained as required by Specification 6.10.2.n. This documentation shall contain:

1. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and

2. A determination that the change will maintain the overall conformance of the solidified waste product to existing requirements of Federal, State, or other applicable regulations.

b. Shall become effective after review and acceptance by the PNSRC and the approval of the Plant Manager.

6.14 OFFSITE DOSE CALCULATION MANUAL (ODCM)

6.14.1 Changes to the ODCM:

a. Shall be documented and records of reviews performed shall be retained as required by Specification 6.10.2.n. This documentation shall contain:

1. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and

2. A determination that the change will maintain the level of radioactive effluent control required by 10 CFR 20.106, 40 CFR Part 190, 10 CFR 50.36a, and Appendix I to 10 CFR Part 50 and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations.

b. Shall become effective after review and acceptance by the PNSRC and the approval of the Plant Manager.

c. Shall be submitted to the Commission in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Annual Radioactive Effluent Release Report for the period of the report in which any change to the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (e.g., month/year) the change was implemented.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 189 TO FACILITY OPERATING LICENSE NO. DPR-58

AND AMENDMENT NO. 175 TO FACILITY OPERATING LICENSE NO. DPR-74

INDIANA MICHIGAN POWER COMPANY

DONALD C. COOK NUCLEAR PLANT, UNIT NOS. 1 AND 2

DOCKET NOS. 50-315 AND 50-316

1.0 INTRODUCTION

By letter dated August 3, 1994, the Indiana Michigan Power Company (the licensee) requested amendments to the Technical Specifications (TS) appended to Facility Operating License Nos. DPR-58 and DPR-74 for the Donald C. Cook Nuclear Plant, Unit Nos. 1 and 2. The proposed amendments would incorporate programmatic controls for radiological effluents and radiological environmental monitoring in the Administrative Controls section of the TS consistent with the requirements of 10 CFR 20.1302, 40 CFR Part 190, 10 CFR 50.36a, and Appendix I to 10 CFR Part 50. At the same time, the licensee proposed to transfer the procedural details of the Radiological Effluent Technical Specifications (RETS) from the TS to the Offsite Dose Calculation Manual (ODCM) or to the Process Control Program (PCP) for solid radioactive wastes as appropriate. With these changes, the specifications related to RETS reporting requirements were simplified. Finally, changes to the definitions of the ODCM and PCP were proposed consistent with these changes. Guidance on these proposed changes was provided to all power reactor licensees and applicants by Generic Letter (GL) 89-01, "Implementation of Programmatic Controls for Radiological Effluent Technical Specifications in the Administrative Controls Section of the Technical Specifications and the Relocation of Procedural Details of RETS to the Offsite Dose Calculation Manual or to the Process Control Program," dated January 31, 1989.

2.0 EVALUATION

2.1 Removal of RETS from the Technical Specifications

Section 50.36 of Title 10 of the Code of Federal Regulations established the regulatory requirements related to the content of TS. The rule requires that TS include items in specific categories, including safety limits, limiting conditions for operation, and surveillance requirements; however, the rule does not specify the particular requirements to be included in a plant's TS. The NRC developed criteria, as described in the "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors," (58 FR 39132) to determine which of the design conditions and associated

surveillances need to be located in the TS because the requirement is "necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety." Briefly, those criteria are (1) detection of abnormal degradation of the reactor coolant pressure boundary, (2) boundary conditions for design basis accidents and transients, (3) primary success paths to mitigate design basis accidents and transients, and (4) functions determined to be important to risk or operating experience. The Commission's final policy statement acknowledged that its implementation may result in the relocation of existing TS requirements to licensee-controlled documents and programs.

The RETS provide the release limits and monitoring and reporting criteria for gaseous, liquid, and solid radioactive effluents. Such releases are a byproduct of the use of a nuclear reaction for power generation. The RETS are not related to the detection of abnormal degradation of the reactor coolant pressure boundary, boundary conditions for design basis accidents and transients, primary success paths to mitigate design basis accidents and transients, or functions determined to be important to risk or operating experience. In GL 89-01 the staff noted that it had examined the contents of the RETS in relation to the Commission's Interim Policy Statement of Technical Specifications Improvements and had determined that programmatic controls could be implemented in the Administrative Controls section of the TS to satisfy the existing regulatory requirements for RETS. The staff had also determined that the procedural details of the TS on radioactive effluents and radiological environmental monitoring could be relocated to the ODCM, while the procedural details for solid radioactive waste could be relocated to the PCP. After relocation, future changes to these procedural details will be controlled by the controls for changes to the ODCM and PCP included in the Administrative Controls section of the TS.

On this basis, the staff concludes that the RETS do not need to be controlled by TS, and changes to the RETS are adequately controlled by 10 CFR 50.59, "Changes, tests, and experiments." Should the licensee's determination conclude that an unreviewed safety question is involved, due to either (1) an increase in the probability or consequences of accidents or malfunctions of equipment important to safety, (2) the creation of a possibility for an accident or malfunction of a different type than any evaluated previously, or (3) a reduction in the margin of safety, NRC approval and a license amendment would be required prior to implementation of the change. NRC inspection and enforcement programs also enable the staff to monitor facility changes and licensee adherence to Updated Final Safety Analysis Report (UFSAR) commitments and to take any remedial action that may be appropriate.

The staff has concluded, therefore, that relocation of RETS is acceptable because (1) their inclusion in TS is not specifically required by 10 CFR 50.36 or other regulations, (2) the RETS are not required to avert an immediate threat to the public health and safety, and (3) changes that are deemed to involve an unreviewed safety question will require prior NRC approval in accordance with 10 CFR 50.59(c).

2.2 Implementation of RETS Requirements in ODCM and PCP

In GL 89-01 the staff provided model specifications and encouraged licensees to propose changes consistent with the GL. The licensee's proposed changes to the TS are in accordance with the guidance provided in NRC GL 89-01 and are addressed below.

The licensee has proposed to incorporate programmatic controls for radioactive effluents and radiological environmental monitoring in Specifications 6.8.4.a., "Radioactive Effluent Controls Program," and 6.8.4.b., "Radiological Environmental Monitoring Program," of the TS as noted in the guidance provided in GL 89-01. The programmatic controls ensure that programs are established, implemented, and maintained to ensure that operating procedures are provided to control radioactive effluents consistent with the requirements of 10 CFR 20.1301, 40 CFR Part 190, 10 CFR 50.36a, and Appendix I to 10 CFR Part 50.

The licensee has confirmed that the detailed procedural requirements addressing Limiting Conditions for Operation, their applicability, remedial actions, associated surveillance requirements, or reporting requirements for the following specifications have been relocated to the ODCM or PCP, as appropriate.

SPECIFICATION	TITLE
3/4.3.3.9	RADIOACTIVITY LIQUID EFFLUENT INSTRUMENTATION
Table 3.3-12	RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION
Table 4.3-8	RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS
3/4.3.3.10	RADIOACTIVE GASEOUS PROCESS AND EFFLUENT MONITORING INSTRUMENTATION
Table 3.3-13	RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION
Table 4.3-9	RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS
3/4.11.1.1	RADIOACTIVE EFFLUENTS - LIQUID EFFLUENTS - CONCENTRATION
Table 4.11-1	RADIOACTIVE LIQUID WASTE SAMPLING AND ANALYSIS PROGRAM
3/4.11.1.2	RADIOACTIVE EFFLUENTS - DOSE
3/4.11.1.3	RADIOACTIVE EFFLUENTS - LIQUID WASTE TREATMENT
3/4.11.2.1	RADIOACTIVE EFFLUENTS - GASEOUS EFFLUENTS - DOSE RATE
Table 4.11-2	RADIOACTIVE GASEOUS WASTE SAMPLING AND ANALYSIS PROGRAM
3/4.11.2.2	RADIOACTIVE EFFLUENTS - DOSE, NOBLE GASES
3/4.11.2.3	RADIOACTIVE EFFLUENTS - DOSES, RADIOIODINES, RADIOACTIVE MATERIAL IN PARTICULATE FORM, AND RADIONUCLIDES OTHER THAN NOBLE GASES
3/4.11.2.4	RADIOACTIVE EFFLUENTS - GASEOUS RADWASTE TREATMENT
3/4.11.3	RADIOACTIVE EFFLUENTS - SOLID RADIOACTIVE WASTE
3/4.11.4	RADIOACTIVE EFFLUENTS - TOTAL DOSE
3/4.12.1	RADIOLOGICAL ENVIRONMENTAL MONITORING
Table 3.12-1	RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM
Table 3.12-2	REPORTING LEVELS FOR RADIOACTIVITY CONCENTRATIONS IN ENVIRONMENTAL SAMPLES
Table 4.12-1	MAXIMUM VALUES FOR THE LOWER LIMITS OF DETECTION

3/4.12.2	RADIOLOGICAL ENVIRONMENTAL MONITORING - LAND USE CENSUS
3/4.12.3	RADIOLOGICAL ENVIRONMENTAL MONITORING - INTERLABORATORY COMPARISON PROGRAM
6.9.1.7	ADMINISTRATIVE CONTROLS - ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT
6.9.1.9	ADMINISTRATIVE CONTROLS - ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
6.16	ADMINISTRATIVE CONTROLS - MAJOR CHANGES TO RADIOACTIVE WASTE TREATMENT SYSTEMS (Liquid, Gaseous, and Solid)

These changes to the ODCM and PCP have been prepared in accordance with the proposed changes to TS 6.13, "Process Control Program (PCP)," and TS 6.14, "Offsite Dose Calculation Manual (ODCM)," and meet the specified criteria. The RETS, as relocated to the ODCM and PCP, can be subsequently changed by the licensee in accordance with 10 CFR 50.59 without prior NRC approval. As stated in new TS 6.10.2.n, the licensee's records of reviews performed for changes made to the ODCM and PCP will be retained for the duration of the operating license.

The licensee has proposed replacing the existing specifications in the Administrative Controls section of the TS for the Annual Radiological Environmental Operating Report (TS 6.9.1.6 and 6.9.1.7), for the Annual Radioactive Effluent Release Report (TS 6.9.1.8 and 6.9.1.9), for the PCP (TS 6.14), and for the ODCM (TS 6.15), with the updated specifications that were provided in GL 89-01, with some editorial changes. Existing reporting details of TS 6.9.1.7 and TS 6.9.1.9 have been relocated to the ODCM.

The TS definitions of ODCM and PCP have been proposed for updating consistent with the guidance of GL 89-01 to reflect their change in scope. The definition of Solidification was proposed for deletion from the TS consistent with the guidance of GL 89-01.

In addition, consistent with the guidance of GL 89-01, the licensee has proposed a consolidated specification for Explosive Gas Monitoring Instrumentation and associated tables. The specifications addressing Liquid Holdup Tanks, Explosive Gas Mixture, and Gas Storage Tanks are also retained although renumbered.

Finally, changes to the Bases are proposed consistent with the above changes and certain editorial changes are proposed for clarity.

On the basis of the above, the staff finds that the changes included in the proposed TS amendments are consistent with the guidance provided in GL 89-01 and that the licensee has adequately relocated the RETS requirements. Because the control of radioactive effluents continues to be limited in accordance with operating procedures that must satisfy the regulatory requirements 10 CFR 20.106, 40 CFR Part 190, 10 CFR 50.36a, and Appendix I to 10 CFR Part 50, the staff concludes that these changes are administrative in nature and there is no adverse impact on plant safety as a consequence. Accordingly, the staff finds the proposed changes acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Michigan State official was notified of the proposed issuance of the amendments. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendments change the requirements with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and change surveillance requirements. The staff has 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 the amendments involve no significant hazards consideration and there has been no public comment on such finding (59 FR 55873). Accordingly, the 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 the amendments.

5.0 CONCLUSION

The staff has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

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