

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

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-237

DRESDEN NUCLEAR POWER STATION, UNIT NO. 2

AMENDMENT TO PROVISIONAL OPERATING LICENSE

Amendment No. 100 License No. DPR-19

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the Commonwealth Edison Company (the licensee) dated April 25, 1988 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.
- Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 3.B. of Provisional Operating License No. DPR-19 is hereby amended to read as follows:
 - B. <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 100, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

This license amendment is effective as of the date of its issuance to be 3. implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Daniel R. Muller, Director Project Project Directorate III-2

Division of Reactor Projects - III, IV, V and Special Projects

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Attachment: Changes to the Technical Specifications

Date of Issuance: August 24, 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 100

PROVISIONAL OPERATING LICENSE DPR-19

DOCKET NO. 50-237

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

REMOVE	INSERT
3/4.1-5	3/4.1-5
3/4.1-6	3/4.1-6
3/4.1-7	3/4.1-7
3/4.1-8	3/4.1-8

TABLE 3.1.1

REACTOR PROTECTION SYSTEM (SCRAM) INSTRUMENTATION REQUIREMENTS

Number le Inst. ls per Trip		Modes in Which Function Must be Operable				
Trip Function	Trip Level Setting	Refuel (6)	Startup/Hot Standby	Run	Action*	1
Mode Switch in Shutdown		X	X	X	A	-
Manual Scram		X	X	x	A	
IRM High Flux	(LT/E) 120/125 of Full Scale	х	x	N/A	A	1
Inoperative		X	X	N/A	A	- 1
APRM High Flux Inoperative** High Flux (15% Scram)	Specification 2.1.A.1 Specification 2.1.A.2	X X X	X(8) X(8) X	X X N/A	A or B A or B	4
High Reactor Pressure	(LT/E) 1060 psig	X(10)	X	X	A	- 1
High Drywell Pressure	(LT/E) 2 psig	X(7), X(9)	X(7), (9)	X(9)	A	- 1
Reactor Low Water Level	(GT/E) 1 inch***	·x	x	X	A	
High Water Level in Scram Discharge Volume (Thermal and dP Switch)	(LT/E) 40 inches above bottom of the Instrument Volume	X(2)	X	X	A or D	
Turbine Condenser Low Vacuum	(GT/E) 23 in. Hg Vacuum	X(3)	X(3)	X	A or C	
Mair Steem Line High Radiation	(LT/E) 3 X Normal Full Power Background	X	X	X(11)	A or C	
Main Steam Line Isolation Valve Closure	(LT/E) 10% Valve Closure	X(3)	X(3)	x	A or C	
Generator Load Rejection	***	X(4)	X(4)	X(4)	A or C	
Turbine Stop Valve Closure	(LT/E) 10% Valve Closure	X(4)	X(4)	X(4)	A or C	
Turbine Control - Loss of Control Oil Pressure	(GT/E) 900 psig	X(4)	X(4)	X(4)	A or C	
	Mode Switch in Shutdown Manual Scram IRM High Flux Inoperative APRM High Flux (15% Scram) High Reactor Pressure High Drywell Pressure Reactor Low Water Level High Water Level in Scram Discharge Volume (Thermal and dP Switch) Turbine Condenser Low Vacuum Mair Steam Line High Radiation Main Steam Line Isolation Valve Closure Generator Load Rejection Turbine Stop Valve Closure Turbine Control - Loss of Control Oil	Mode Switch in Shutdown Manual Scram IRM High Flux Inoperative APRM High Flux (15% Scram) High Reactor Pressure High Drywell Pressure Keactor Low Water Level High Water Level in Scram Discharge Volume (Thermal and dP Switch) Turbine Condenser Low Vacuum Mair Steem Line Isolation Valve Closure Generator Load Rejection Turbine Stop Valve Closure Turbine Control - Loss of Control Oil Trip Level Setting Tirjp Level Setting (LT/E) 120/125 of Full Scale Specification 2.1.A.1 LT/E) 1060 psig (LT/E) 2 psig (LT/E) 10 inches above bottom of the Instrument Volume (LT/E) 3 in. Hg Vacuum (LT/E) 10% Valve Closure (LT/E) 10% Valve Closure (LT/E) 10% Valve Closure (LT/E) 10% Valve Closure (GT/E) 900 psig	Trip Function Trip Level Setting Refuel (6) Mode Switch in Shutdown Manual Scram IRM High Flux Inoperative APRM High Flux Inoperative** High Flux (15% Scram) Specification 2.1.A.1 X X High Reactor Pressure High Drywell Pressure (LT/E) 1060 psig X(10) Reactor Low Water Level High Water Level in Scram Discharge Volume (Thermal and dP Switch) Turbine Condenser Low Vacuum Mair Steam Line Isolation Valve Closure Generator Load Rejection Turbine Stop Valve Closure CGT/E) 10% Valve Closure X(4) CGT/E) 900 psig X(4)	Trip Function Trip Level Setting Refuel (6) Stantup/Hot Startup/Hot Startup/Hot Stantup/Hot Standby Mode Switch in Shutdown Manual Scram IRM High Flux (LT/E) 120/125 of Full Scale Inoperative APRM High Flux Inoperative* APRM High Flux Inoperative* APRM High Flux Inoperative* APRM High Flux Inoperative* APRM High Reactor Pressure (LT/E) 1060 psig (LT/E) 2 psig (LT/E) 3 ps	Must be Operable Startup/Hot Startup/Hot Startup/Hot Startup/Hot Stardby Run	Trip Function Trip Level Setting Refuel (6) Standby Run Action*

Notes: (LT/E) = Less than or equal to.
(GT/E) = Greater than or equal to.
(Notes continue on next two pages)

DRESDEN II DPR-19 Amendment No. 13, 71, 75, 82, 99,

NOTES: (For Table 3.1.1)

- 1. There shall be two operable or tripped trip systems for each function.
- Permissible to bypass, with control rod block, for reactor protection system reset in refuel and shutdown positions of the reactor mode switch.
- 3. Permissible to bypass when reactor pressure less than 600 psig.
- 4. Permissible to bypass when first stage turbine pressure less than that which corresponds to 45% rated steam flow.
- The design permits closure of any one valve without a scram being initiated.
- 6. When the reactor is subcritical and the reactor water temperature is less than 212°F, only the following trip functions need to be operable:
 - a. Mode Switch in Shutdown
 - b. Manual Scram
 - c. High Flux IRM
 - d. Scram Discharge Volume High Level
- 7. Not required to be operable when primary containment integrity is not required.
- Not required while performing low power physics tests at atmospheric pressure during or after refueling at power levels not to exceed 5 MW(t).
- 9. May be bypassed when necessary during purging for containment inerting or deinerting.
- Not required to be operable when the reactor pressure vessel head is not bolted to the vessel.
- 11. Due to addition of hydrogen to the primary coolant, the Main Steam Line Radiation monitor setting will be less than or equal to 3 times full power background without hydrogen addition for all conditions except for greater than 20% power with hydrogen being injected during which the Main Steam Line Radiation trip setting will be less than or equal to 3 times full power weekground with hydrogen again.

(Cont'd. next page)

DRESDEN II DPR-19 Amendment No. 13, 71, 75, 82, 99

NOTES: (For Table 3.1.1 Cont'd.)

Required changes in Main Steam Line Radiation Monitor trip setting will be made within 24 hrs. except during controlled power descensions at which time the setpoint change will be made prior to going below 20% power. If due to a recirculation pump trip or other unanticipated power reduction event the reactor is below 20% power without the setpoint change, control rod motion will be suspended until the necessary trip setpoint adjustment is made

* If the first column cannot be met for one of the trip systems, that trip system shall be tripped.

If the first column cannot be met for both trip systems, the appropriate actions listed below shall be taken:

- a. Initiate insertion of operable rods and complete insertion of all operable rods within 4 hours.
- b. Reduce power level to IRM range and place mode switch in the Startup/Hot Standby position within 8 hours.
- Reduce turbine load and close main steam line isolation valves within 5 hours.
- d. In the refuel mode, when any control rod is withdrawn, suspend all operations involving core alterations and insert all insertable control rods within one hour.
- ** An APRM will be considered inoperable if there are less than 2 LPRM inputs per level or there are less than 50% of the normal complement of LPRM's to an APRM.
- *** 1 inch on the water level instrumentation is greater than or equal to 504" above vessel zero (see Bases 3.2).
- **** Trips upon actuation of the fast closure solenoid which trips the turbine control valves.

TABLE 4.1.1

SCRAM INSTRUMENTATION FUNCTIONAL TESTS

MINIMUM FUNCTIONAL TEST FREQUENCIES FOR SAFETY INSTR. AND CONTROL CIRCUITS

Instrument Channel	Group (3)	Functional Test	Minimum Frequency (4)
Mode Switch in Shutdown	A	Place Mode Switch in Shutdown	Each Refueling Outage
Manual Scram	Α	Trip Channel and Alarm	Every 3 Months
IRM * High Flux * Inoperative	C	Trip Channel and Alarm (5) Trip Channel and Alarm	Before Each Startup (6 Before Each Startup (6
APRM High Flux Inoperative High Flux (15% scram)	8 8 8	Trip Output Relays (5) Trip Output Relays Trip Output Relays	Once Each Week Once Each Week Before Each Startup
High Reactor Pressure	A	Trip Channel and Alarm	(1)
High Drywell Pressure	A	Trip Channel and Alarm	(1)
Reactor Low Water Level (2)	В	(8)	(1)
High Water Level in Scram Discharge Volumes (Thermal and dp Switch)	e A	Trip Channel and Alarm (7)	Every 3 Months
Turbine Condenser Low Vacuum	A	Trip Channel and Alarm	(1)
Main Steam Line High Radiation (2)	В	Trip Channel and Alarm (5)	Once Each Week
Main Steam Line Isolation Valve Closure	A	Trip Channel and Alarm	(1)
Generator Load Rejection	A	Trip Channel and Alarm	(1)
Turbine Stop Valve Closure	Α	Trip Channel and Alarm	(1)
Turbine Control - Loss of Control Oil Pressure	Α	Trip Channel and Alarm	(1)

Notes: (See next page.)



UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20655

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-249

DRESDEN NUCLEAR POWER STATION, UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 96 License No. DPR-25

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the Commonwealth Edison Company (the licensee) dated April 25, 1988 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.
- Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 3.B. of Facility Operating License No. DPR-25 is hereby amended to read as follows:
 - B. <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 96, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

 This license amendment is effective as of the date of its issuance to be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Daniel R. Muller, Director Project Directorate III-2 Division of Reactor

Projects - III, IV, V and Special Projects

Attachment: Changes to the Technical Specifications

Date of Issuance: August 24, 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 96

FACILITY OPERATING LICENSE DPR-25

DOCKET NO. 50-249

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

REMOVE	INSERT
3/4.1-5	3/4.1-5
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TABLE 3.1.1

REACTOR PROTECTION SYSTEM (SCRAM' STRUMENTATION REQUIREMENTS

The second states (Second		TRONCHIAITON REQUIREMENTS					
Minimum Number Operable Inst. Channels per Trip			Modes in Which Function Must be Operable				ī
(1) System	Trip Function	Trip Level Setting	Refuel (6)	Startup/Hot Standby	Run	Action*	
1	Mode Switch in Shutdown		X	x	x	A	
1	Manual Scram		x	x	X	A .	
3	IRM High Flux	(LT/E) 120/125 ef Full Scale	x	x	N/A	À	
3	Inoperativa		X	x	N/A	A .	
2 2 2	APRM High Flux Inoperative** High Flux (15% Scram)	Specification 2.1.A.1 Specification 2.1.A.2	X X	X(8) X(8)	X X N/A	A or B	
2	High Reactor Pressure	(LT/E) 1060 psig	X(10)	x	X	•	
2	High Drywell Pressure	(LT/E) 2 psig	X(7), X(9)			•	
2	Reactor Low Water Level	(GT/E) 1 inch***	X	X(7), (9)		•	
(Per Bank)	High Water Level in Scram Discharge Volum (Float and dP Switch)	(LT/E) 37.25 inches above bottom of the Instrument Volume	X(2)	ì	x	A or D	
2	Turbine Condenser Low Vacuum	(GT/E) 23 in. Hg Vacuum	X(3)	X(3)	x	A or C	
2	Main Steam Line High Radiation	(LT/E) 3 X Normal Full Power Background	x	x	x	A or C	
4(5)	Main Steem Line Isolation Valve Closure	(LT/E) 10% Valve Closure	X(3)	X(3)	x	A or C	
2	Generator Load Rejection	***	X(4)	X(4)	X(4)	A or C	
2	Turbine Stop Valve Closure	(LT/E) 10% Valve Closure	X(4)	X(4)	X(4)	A or C	
2	Turbine Control - Loss of Control Oil Pressure	(GT/E) 900 psig	X(4)	X(4)	X(4)	A or C	

Notes: (LT/E) = Less than or equal to.
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(Cont'd. next page)

NOTES: (For Table 3.1.1 Cont'd.)

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- d. In the refuel mode, when any control rod is withdrawn, suspend all operations involving core alterations and insert all insertable control rods within one hour.
- ** An APRM will be considered inoperable if there are less than 2 LPRM inputs per level or there are less than 50% of the normal complement of LPRM's to an APRM.
- *** 1 inch on the water level instrumentation is greater than or equal to 504" above vessel zero (see Bases 3.2).
- **** Trips upon actuation of the fast closure solenoid which trips the turbine control valves.

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Manual Scram	Α	Trip Channel and Alarm	Every 3 Months
IRM * High Flux * Inoperative	C	Trip Channel and Alarm (5) Trip Channel and Alarm	Before Each Startup (6) before Each Startup (6)
APRM High Flux Inoperative High Flux (15% scram)	B B	Trip Output Relays (5) Trip Output Relays Trip Output Relays	Once Each Week Once Each Week Before Each Startup
High Reactor Pressure	Α	Trip Channel and Alarm	(1)
High Drywell Pressure	Α	Trip Channel and Alarm	(1)
Reactor Low Water Level (2)	В	(8)	(1)
High Water Level in Scram Discharge Volumes (Float and dp Switch)	e A	Trip Channel and Alarm (7)	Every 3 Months
Turbine Concenser Low Vacuum	Α	Trip Channel and Alarm	(1)
Main Steam Line High Radiation (2)	В	Trip Channel and Alarm (5)	Once Each Week
Main Steam Line Isolation Valve Closure	A	Trip Channel and Alarm	(1)
Generator Load Rejection	Α	Trip Channel and Alarm	(1)
Turbine Stop Valve Closure	Α	Trip Channel and Alarm	(1)
Turbine Control - Loss of Control Oil Pressure	A	Trip Channel and Alarm	(1)

Notes: (See next page.)