



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

COMMONWEALTH EDISON COMPANY

AND

IOWA-ILLINOIS GAS AND ELECTRIC COMPANY

DOCKET NO. 50-254

QUAD CITIES NUCLEAR POWER STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 88
License No. DPR-29

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Commonwealth Edison Company (the licensee) dated April 25, 1983, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-29 is hereby amended to read as follows:

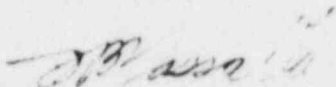
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(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 88, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION



Domenic B. Vassallo, Chief
Operating Reactors Branch #2
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: June 6, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 88

FACILITY OPERATING LICENSE NO. DPR-29

DOCKET NO. 50-254

Revise the Technical Specifications by deleting the following pages and inserting the enclosed pages.

PAGE

3.2/4.2-11

3.2/4,2-16

3.2/4.2-17

QUAD-CITIES

DPR-29

TABLE 3.2-1

INSTRUMENTATION THAT INITIATES PRIMARY CONTAINMENT ISOLATION FUNCTIONS

Minimum Number of Operable or Tripped Instrument Channels ⁽¹⁾	Instruments	Trip Level Setting	Action ⁽²⁾
4	Reactor low water ⁽³⁾	>144 inches above top of active fuel*	A
4	Reactor low low water	≥84 inches above top of active fuel*	A
4	High drywell pressure ⁽³⁾	≤2 psig ⁽³⁾	A
16	High flow main steamline ⁽⁵⁾	≤140% of rated steam flow	B
16	High temperature main steamline tunnel	≤200° F	B
4	High radiation main steamline tunnel ⁽⁶⁾	≤7 x normal rated power background	B
4	Low main steam pressure ⁽⁴⁾	≥825 psig	B
4	High flow RCIC steamline	≤300% of rated steam flow ⁽⁷⁾	C
16	RCIC turbine area high temperature	≤200° F	C
4	High flow HPCI steamline	≤300% of rated steam flow ⁽⁷⁾	D
16	HPCI area high temperature	≤200° F	D

Notes

- Whenever primary containment integrity is required, there shall be two operable or tripped systems for each function, except for low pressure main steamline which only need be available in the Run position.
- Action: 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:
 - Initiate an orderly shutdown and have the reactor in Cold Shutdown condition in 24 hours.
 - Initiate an orderly load reduction and have reactor in Hot Standby within 8 hours.
 - Close isolation valves in RCIC system.
 - Close isolation valves in HPCI subsystem.
- Need not be operable when primary containment integrity is not required.
- The isolation trip signal is bypassed when the mode switch is in Refuel or Startup/Hot Shutdown.
- This instrumentation also isolates the control room ventilation system.
- This signal also automatically closes the mechanical vacuum pump discharge line isolation valves.
- Includes a time delay of 36 ± 10 seconds.

Top of active fuel is defined as 360" above vessel zero for all water levels used in the LOCA analysis (see Bases 3.2).

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DPR-29

TABLE 4.2-1

MINIMUM TEST AND CALIBRATION FREQUENCY FOR CORE AND CONTAINMENT COOLING SYSTEMS INSTRUMENTATION, ROD BLOCKS, AND ISOLATIONS⁷¹

Instrument Channel	Instrument Functional Test ⁽²⁾	Calibration ⁽²⁾	Instrument Check ⁽²⁾
ECCS Instrumentation			
1. Reactor low-low water level	(1)	Once/3 months	Once/day
2. Drywell high pressure	(1)	Once/3 months	None
3. Reactor low pressure	(1)	Once/3 months	None
4. Containment spray interlock			
a. 2/3 core height	(1)	Once/3 months	None
b. Containment pressure	(1)	Once/3 months	None
5. Low-pressure core cooling pump discharge	(1)	Once/3 months	None
6. Undervoltage 4-kV essential	Refueling outage	Refueling outage	None
Rod Blocks			
1. APRM downscale	(1) (3)	Once/3 months	None
2. APRM flow variable	(1) (3)	Refueling outage	None
3. IRM upscale	(5) (3)	(5) (3)	None
4. IRM downscale	(5) (3)	(5) (3)	None
5. RBM upscale	(1) (3)	Refueling outage	None
6. RBM downscale	(1) (3)	Once/3 months	None
7. SRM upscale	(5) (3)	(5) (3)	None
8. SRM detector not in startup position	(5) (3)	(6)	None
9. IRM detector not in startup position	(5)	(6)	None
10. SRM downscale	(5) (3)	(5) (3)	None
11. High water level in scram discharge volume (SDV)	Once/3 months	Not applicable	None
12. SDV high level trip bypassed	Refueling outage	Not applicable	None
Main Steamline Isolation			
1. Steam tunnel high temperature	Refueling outage	Refueling outage	None
2. Steamline high flow	(1)	Once/3 months	Once/day
3. Steamline low pressure	(1)	Once/3 months	None
4. Steamline high radiation	(1) (4)	Refueling outage	Once/day
5. Reactor low low water level	(1)	Once/3 months	Once/day
RCK Isolation			
1. Steamline high flow	Once/3 months (8)	Once/3 months (8)	None
2. Turbine area high temperature	Refueling outage	Refueling outage	None
3. Low reactor pressure	Once/3 months	Once/3 months	None

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TABLE 4.2-1 (Cont'd)

Instrument Channel	Instrument Functional Test ⁽²⁾	Calibration ⁽²⁾	Instrument Check ⁽²⁾
MPCI Isolation			
1. Steamline high flow	(1) ()	Once/3 months (8)	None
2. Steamline area high temperature	Refueling outage	Refueling outage	None
3. Low reactor pressure	(1)	Once/3 months	None
Reactor Building Ventilation System Isolation And Standby Treatment System Initiation			
1. Ventilation exhaust duct radiation monitors	(1)	Once/3 months	Once/day
2. Refueling floor radiation monitors	(1)	Once/3 months	Once/day
Steam Jet Air Ejector Off-Gas Isolation			
1. Off-gas radiation monitors	(1) (4)	Refueling outage	Once/day
Control Room Ventilation System Isolation			
1. Reactor low water level	(1)	Once/3 months	Once/day
2. Drywell high pressure	(1)	Once/3 months	None
3. Main steamline high flow	(1)	Once/3 months	Once/day
4. Ventilation exhaust duct radiation monitors	(1)	Once/3 months	Once/day

Notes

1. Initially once per month until exposure hours (M as defined on Figure 4.1-1) are 2.0×10^5 , thereafter according to Figure 4.1-1 with an interval not less than 1 month nor more than 3 months. The compilation of instrument failure rate data may include data obtained from other boiling water reactors for which the same design instrument operates in an environment similar to that of Quad-Cities Units 1 and 2.
2. Functional tests, calibrations, and instrument checks are not required when these instruments are not required to be operable or are tripped.
3. This instrumentation is excepted from the functional test definition. The functional test shall consist of injecting a simulated electrical signal into the measurement channel.
4. This instrument channel is excepted from the functional test definitions and shall be calibrated using simulated electrical signals once every 3 months.
5. Functional tests shall be performed before each startup with a required frequency not to exceed once per week. Calibrations shall be performed during each startup or during controlled shutdowns with a required frequency not to exceed once per week.
6. The positioning mechanism shall be calibrated every refueling outage.
7. Logic system functional tests are performed as specified in the applicable section for these systems.
8. Functional test shall include verification of operation of the degraded voltage 5-minute timer and 7-second inherent timer.
9. Verification of the time delay setting of $3 \leq \tau \leq 10$ seconds shall be performed during each refueling outage.



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

COMMONWEALTH EDISON COMPANY

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IOWA-ILLINOIS GAS AND ELECTRIC COMPANY

DOCKET NO. 50-265

QUAD CITIES NUCLEAR POWER STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 83
License No. DPR-30

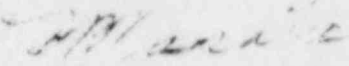
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 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-30 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 83, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION


Domenic B. Vassallo, Chief
Operating Reactors Branch #2
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: June 6, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 83

FACILITY OPERATING LICENSE NO. DPR-30

DOCKET NO. 50-265

Revise the Technical Specifications by deleting the following pages and inserting the enclosed pages.

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3.2/4.2-11

3.2/4,2-16

3.2/4.2-17

QUAD-CITIES
DPR-30

TABLE 3.2-1

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4	Reactor low low water	≥84 inches above top of active fuel ⁴	A
4	High drywell pressure ⁽³⁾	≤2 psig ⁽³⁾	A
16	High flow main steamline ⁽⁵⁾	≤14% of rated steam flow	B
16	High temperature main steamline tunnel	≤200° C	B
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4	Low main steam pressure ⁽⁴⁾	≥825 psig	B
4	High flow RCIC steamline	≤300% of rated steam flow ⁽⁷⁾	C
16	RCIC turbine area high temperature	≤200° F	C
4	High flow HPCI steamline	≤300% of rated steam flow ⁽⁷⁾	D
16	HPCI area high temperature	≤200° F	D

Notes

- Whenever primary containment integrity is required, there shall be two operable or tripped systems for each function, except for low pressure main steamline which only need be available in the Run position.
- Action: 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:
 - Initiate an orderly shutdown and have the reactor in Cold Shutdown condition in 24 hours.
 - Initiate an orderly load reduction and have reactor in Hot Standby within 8 hours.
 - Close isolation valves in RCIC system.
 - Close isolation valves in HPCI subsystem.
- Need not be operable when primary containment integrity is not required.
- The isolation trip signal is bypassed when the mode switch is in Relief or Starting/Hot Shutdown.
- This instrumentation also isolates the control room ventilation system.
- This signal also automatically closes the mechanical vacuum pump discharge line isolation valves.
- Includes a time delay of 32 ± 10 seconds.

Top of active fuel is defined as 350" above vessel zero for all water levels used in the LOCA analysis (see Boxes 3.2).

QUAD-CITIES
DPR-30

TABLE 4.2-1

MINIMUM TEST AND CALIBRATION FREQUENCY FOR CORE AND CONTAINMENT COOLING SYSTEMS INSTRUMENTATION,
ROD BLOCKS, AND ISOLATIONS⁽⁷⁾

Instrument Channel	Instrument Functional Test ⁽²⁾	Calibration ⁽²⁾	Instrument Check ⁽²⁾
ECCS Instrumentation			
1. Reactor low-low water level	(1)	Once/3 months	Once/day
2. Drywell high pressure	(1)	Once/3 months	None
3. Reactor low pressure	(1)	Once/3 months	None
4. Containment spray interlock			
a. 2/3 core height	(1)	Once/3 months	None
b. Containment pressure	(1)	Once/3 months	None
5. Low-pressure core cooling pump discharge	(1)	Once/3 months	None
6. Undervoltage 4-kV essential	Refueling outage	Refueling outage	None
Rod Blocks			
1. APRM downscale	(1) (3)	Once/3 months	None
2. APRM flow variable	(1) (3)	Refueling outage	None
3. IRM upscale	(5) (3)	(5) (3)	None
4. IRM downscale	(5) (3)	(5) (3)	None
5. RBM upscale	(1) (3)	Refueling outage	None
6. RBM downscale	(1) (3)	Once/3 months	None
7. SRM upscale	(5) (3)	(5) (3)	None
8. SRM detector not in startup position	(5) (3)	(6)	None
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10. SRM downscale	(5) (3)	(5) (3)	None
11. High water level in scram discharge volume (SDV)	Once/3 months	Not applicable	None
12. SDV high level trip bypassed	Refueling outage	Not applicable	None
Main Steamline Isolation			
1. Steam tunnel high temperature	Refueling outage	Refueling outage	None
2. Steamline high flow	(1)	Once/3 months	Once/day
3. Steamline low pressure	(1)	Once/3 months	None
4. Steamline high radiation	(1) (4)	Refueling outage	Once/day
5. Reactor low low water level	(1)	Once/3 months	Once/day
RCIC Isolation			
1. Steamline high flow	Once/3 months (8)	Once/3 months (8)	None
2. Turbine area high temperature	Refueling outage	Refueling outage	None
3. Low reactor pressure	Once/3 months	Once/3 months	None

**QUAD-CITIES
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TABLE 4.2-1 (Cont'd)

Instrument Channel	Instrument Functional Test ⁽²⁾	Calibration ⁽²⁾	Instrument Check ⁽²⁾
WPCI Isolation			
1. Steamline high flow	(1)()	Once/3 months (8)	None
2. Steamline area high temperature	Refueling outage	Refueling outage	None
3. Low reactor pressure	(1)	Once/3 months	None
Reactor Building Ventilation System Isolation And Standby Treatment System Initiation			
1. Ventilation exhaust duct radiation monitors	(1)	Once/3 months	Once/day
2. Refueling floor radiation monitors	(1)	Once/3 months	Once/day
Steam Jet Air Ejector Off-Gas Isolation			
1. Off-gas radiation monitors	(1) (4)	Refueling outage	Once/day
Control Room Ventilation System Isolation			
1. Reactor low water level	(1)	Once/3 months	Once/day
2. Drywell high pressure	(1)	Once/3 months	None
3. Main steamline high flow	(1)	Once/3 months	Once/day
4. Ventilation exhaust duct radiation monitors	(1)	Once/3 months	Once/day

Notes

1. Initially once per month until exposure hours (M as defined on Figure 4.1-1) are 2.0×10^5 ; thereafter, according to Figure 4.1-1 with an interval not less than 1 month nor more than 3 months. The compilation of instrument failure rate data may include data obtained from other boiling water reactors for which the same design instrument operates in an environment similar to that of Quad-Cities Units 1 and 2.
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