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

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-295

ZION STATION UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 60
License No. DPR-39

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The applications for amendment by Commonwealth Edison Company (the licensee) dated October 31, 1977, December 22, 1978, and October 24, 1980 comply 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 applications, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-39 is hereby amended to read as follows:

   (2) Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 60 , 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

Steven A. Varga, Chief
Operating Reactors Branch #3
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: January 14, 1981

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

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-304

ZION STATION UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 57
License No. DPR-48

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The applications for amendment by Commonwealth Edison Company (the licensee) dated October 31, 1977, December 22, 1978, and October 24, 1980 comply 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 applications, 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-48 is hereby amended to read as follows:

(2) Technical Specifications

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

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

FOR THE NUCLEAR REGULATORY COMMISSION

Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: January 14, 1981

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 60 TO FACILITY OPERATING LICENSE NO. DPR-39

AMENDMENT NO. 57 TO FACILITY OPERATING LICENSE NO. DPR-48

DOCKET NOS. 50-295 AND 50-304

Revise Appendix A as follows:

Remove Pages	Insert Pages
35	35
38	38
140	140
205	205
206	206

Revise Appendix B as follows:

Remove Pages	Insert Pages
9	9

	Reactor Trip Channel Description	Channel Check	Channel Calibration	Channel Function Test
1.	Manual	-	-	S/U(1)
2.	Power Range Neutron Flux (Low Setpoint)	S	D(1) Q(2) EFPM(3)	S/U(4)
3.	Power Range Neutron Flux	S		M
4.	Power Range Positive Flux Rate	N.A.		M
5.	Power Range Negative Flux Rate	N.A.		M
6.	Source Range Neutron Flux	S(1)	N.A.	S/U(1)
7.	Intermediate Range Neutron	S(1)	N.A.	S/U(2)
8.	Overtemperature ΔT	S	R	M
9.	Overpower ΔT	S	R	M
10.	Pressurizer Low Pressure	S	R	M
11.	Pressurizer High Pressure	S	R	M
12.	Pressurizer High Level	S	R	M
13.	Low Primary Coolant Flow	S	R	M
14.	RCP Bus Undervoltage	N.A.	R	R
15.	RCP Bus Underfrequency	N.A.	R	R
16.	RCP Breaker Trip	N.A.	N.A.	R

Remarks

(1) If not done in previous week.

(1) Heat Balance Calibration
(2) Recalibrate
(3) Compare incore to excore axial imbalance. Recalibrate as per specification 3.2.2.1 if difference >1%.
(4) Once per month when in-service. Not required if performed within the previous 7 days.

(1) Once/Shift when in-service.

(2) Not required if performed within the previous 7 days.

TABLE 4.1-1

Reactor Protection System Testing and Calibration Requirements*

Amendment No. 60 , Unit 1
Amendment No. 57 , Unit 2

Bases:

4.1 The bases for Tables 3.1-1 and 4.1-1 is an analysis of the reactor protection and control instrumentation systems. Conservative failure rates for the individual channels were employed based on published data typical for individual components in the channels. The test and calibration frequencies are therefore quite conservative.

Considerable added conservatism is inherent in the analysis since no credit was established for the fact that there exists a wide margin of diversity in trip signal origin.(1) Should a situation develop which would require a trip, such signals would generally be originated by more than one functional unit. Therefore, from the standpoint of accomplishing the required trip or actuation, far greater redundancy exists than is credited in establishing the specification tables.

The Power Range Neutron Flux (Low Setpoint) channel function test is not performed continually above 25% power levels due to the possibility of inducing inadvertent reactor trips. trip is a redundant trip at low power and the test is to be performed at startup and as soon as is practical on controlled shutdown if the power is to remain at low levels (below 10%) for any extended periods of time.

(1) FSAR Section 7.2

	Device Actuation	Continuity Check to Final Actuating Device
G) Service Water Pump Starts and System Isolation (cont.)		
Component		
OMOV-SW0005	X	
OMOV-SW0008	X	
OFCV-SW54	X	
Service Water Pump 1C (2C)	X	
MOV-SW0002	X	
MOV-S00115	X	
OMOV-SW0007	X	
OMOV-SW0010	X	
OMOV-SW0009	X	
H) Containment Isolation Phase "A" & Isolation Valve Seal Water		
Component		
AOV-VC8149A	X	
AOV-VC8152	X	
AOV-DT9159A	X	
AOV-DT9160A	X	
AOV-DT9157	X	
LCV-DT1003	X	
Reactor Coolant Drain Pump 1A (2A)	X	
Reactor Coolant Drain Pump 1B (2B)	X	
FCV-SS9354A	X	
FCV-SS9355A	X	
FCV-SS9356A	X	
FCV-SS9357A	X	
FCV-1A01A		X
FCV-PR24A	X	
FCV-FP08	X	
FCV-SS02	X	
FCV-SS03	X	
FCV-SS04	X	
FCV-SS05	X	
ACV-VC8149C	X	

Engineered Safeguards Equipment Actuation Test

TABLE 4.4-2 (Sheet 5 of 8)

Amendment No. 60, Unit 1
Amendment No. 57, Unit 2

Valve	Service
MOV-VC8100 (double disc)	R.C. pump seal water return
MOV-CC9414 (double disc)	Cooling water return from R.C. pumps
MOV-CC9413 A&B	Cooling water supply to R. C. pumps
AOV-CC9437	Cooling water return from excess letdown heat exchanger
CC9500	Cooling water supply to excess letdown heat exchanger
MOV-CC9438 & FCV685	Cooling water return from excess letdown heat exchanger
FCV-FP08	Fire protection to containment
CS0052 & CS0053	Containment pressure sensor inlet
CS0054 & CS0055	Containment pressure sensor inlet
CS0056 & CS0057	Containment pressure sensor inlet
CS0058 & CS0059	Containment pressure sensor inlet

Valve	Service
AOV-BD0001 & FCV-BD17	Blowdown from steam generator
AOV-BD0002 &FCV-BD17	Blowdown from steam generator
AOV-BD0003 & FCV-BD17	Blowdown from steam generator
AOV-BD0004 & FCV-BD17	Blowdown from steam generator
AOV-BD0005 & FCV-BD17	Blowdown from steam generator
AOV-BD0006 & FCV-BD17	Blowdown from steam generator
AOV-BD0007 & FCV-BD17	Blowdown from steam generator
AOV-BD0008 & FCV-BD17	Blowdown from steam generator
FCV-SS02	Blowdown from steam generator sample
FCV-SS03	Blowdown from steam generator sample

Containment Isolation Valves

TABLE 4.9-3

Amendment No. 60, Unit 1
Amendment No. 57, Unit 2

Valve	Service
FCV-SS04	Blowdown fror steam generator sample
FCV-SS05	Blowdown from steam generator sample
FCV-WD17 A & B	Discharge from containment sump pumps
VC8369A & VC8372A	R.C. seal water supply
VC8369B & VC8372B	R.C. seal water supply
VC8369C & VC8372C	R.C. seal water supply
VC8369D & VC8372D	R.C. seal water supply
AOV-RC8025 & RC8026	Pressurizer relief tank to waste gas analyzer
AOV-RC8028 & RC8029	Primary water to press. relief tank
AOV-RC8024 & RC8033	Nitrogen manifold to press. relief tank
VC8480 A & B	R.C. loop fill header
MOV-VC8105 & VC8106	Charging to regenerative heat exchanger
AOV-VC8152 & VC8153	Letdown to regenerative heat exchanger
SF8787 & SF0010	Purification pump to refueling cavity
SF8767 & OSF0011(Unit 1) OSF0012(Unit 2)	Refueling cavity drain
FCV-VN02 A & B	Non-filtered vents from containment
FCV-VF01 A & B	Filtered vents from containment
FCV-PR19 A & B	Reactor vessel leak detection
FCV-PR20 A & B	Reactor vessel leak detection
FCV-PR21 A & B	Reactor vessel leak detection
FCV-PR22 A & B	Reactor vessel leak detection
FCV-PR23 A & B	Reactor vessel leak detection reference
FCV-PR24 A & B	Containment air particulate & gas monitor inlet
PR0029 & PR0030	Containment air particulate & gas monitor outlet
PR0007 & PR0008	Containment air sampling inlet

Containment Isolation Valves

TABLE 4.9-3 (Cont.)

Amendment No. 60, Unit 1
Amendment No. 57, Unit 2

1.3 CHEMICAL EFFLUENTS (Cont'd)

C. N.A.*

D. Sanitary Wastes

All sanitary wastes are discharged to the North Shore Sanitary District for treatment.

2.3 CHEMICAL EFFLUENTS (Cont'd)

B.2 (a) The results of the monitoring program under Section 2.3.B.1(a) above shall be reported in accordance with Section 3.0. If the discharge of a chemical is greater than that addressed in the FES or subsequent NRC Environmental Impact Appraisals, an evaluation of the environmental impact of the discharge shall be included in the annual report.

B.2 (b) The information documented in the monitoring program in Section 2.3.B.1 (b) above will be maintained in station records and reported with evaluations provided in the annual report as required by Section 2.3.B.2(a) above.

C. N.A.*

D. N.A.*

*Not Applicable