



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

DUQUESNE LIGHT COMPANY

OHIO EDISON COMPANY

PENNSYLVANIA POWER COMPANY

DOCKET NO. 50-334

BEAVER VALLEY POWER STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 90
License No. DPR-66

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Duquesne Light Company, Ohio Edison Company, and Pennsylvania Power Company (the licensees) dated June 28, 1984, 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-66 is hereby amended to read as follows:

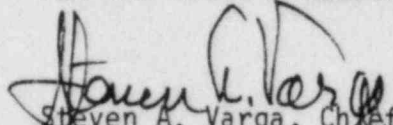
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(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 90, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective on issuance, to be implemented within 30 days of 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 25, 1985

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 90 TO FACILITY OPERATING LICENSE NO. DPR-66

DOCKET NO. 50-334

Revise Appendix A as follows:

<u>Remove Pages</u>	<u>Insert Pages</u>
3/4 3-19a	3/4 3-19a
3/4 3-24	3/4 3-24
3/4 3-24a	3/4 3-24a
3/4 3-27a	3/4 3-27a
3/4 3-28	3/4 3-28
3/4 3-31a	3/4 3-31a
3/4 3-66	3/4 3-66
3/4 3-67	3/4 3-67

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ACTION</u>
7. AUXILIARY FEEDWATER					
a. Steam Gen. Water Level- Low-low (Loop Stop Valves Open)					
i. Start Turbine Driven Pump	3/stm. gen.	2/stm. gen. any stm. gen.	2/stm. gen.	1, 2, 3	14
ii. Start Motor Driven Pumps	3/stm. gen.	2/stm. gen. any 2 stm. gen.	2/stm. gen.	1, 2, 3	14
b. Undervoltage-RCP (Start Turbine Driven Pump)	(3)-1/bus	2	2	1	14
c. S.I. (Start Motor-Driven Pumps)	See 1 above (all S.I. initiating functions and requirements)				
d. Turbine Driven Pump Discharge Pressure Low With Steam Valve Open - (Start Motor-Driven Pump)	(2)-1/Train	1	1	1, 2, 3	18
e. Emergency Bus Undervoltage (Start Motor Driven Pumps)	1/bus	1	1	1, 2, 3	18
f. Trip of Main Feedwater Pumps - (Start Motor Driven Pumps)	1/pump	1	1	1, 2, 3	18

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TABLE 3.3-4 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION TRIP SETPOINTS

FUNCTIONAL UNIT	TRIP SETPOINT	ALLOWABLE VALUES
4. STEAM LINE ISOLATION		
a. Manual	Not Applicable	Not Applicable
b. Automatic Actuation Logic	Not Applicable	Not Applicable
c. Containment Pressure-- Intermediate-High-High	≤ 5.0 psig	≤ 5.5 psig
d. Steamline Pressure-Low	≥ 500 psig steam line pressure	≥ 480 psig steam line pressure
e. High Negative Steam Pressure Rate	≤ 100 psi with a time constant ≥ 50 seconds	≤ 110 psi with a time constant ≥ 50 seconds
5. TURBINE TRIP AND FEEDWATER ISOLATION		
a. Steam Generator Water Level High-High	$\leq 75\%$ of narrow range Instrument span each steam generator	$\leq 76\%$ of narrow range Instrument span each steam generator
6. LOSS OF POWER		
a. 1. 4.16kv Emergency Bus Undervoltage (Loss of Voltage) (Trip Feed)	$\geq 75\%$ of nominal bus voltage with a 1 ± 0.1 second time delay	$\geq 74\%$ of nominal bus voltage with a 1 ± 0.1 second time delay
2. 4.16kv Emergency Bus (Start Diesel)	$\geq 83\% - 12$ cycles	
b. 4.16kv Emergency Bus Undervoltage (Degraded Voltage)	+ 3% 90% - 0% of nominal bus voltage with a 90 ± 5 second time delay	$\geq 89\%$ of nominal bus voltage with a 90 ± 5 second time delay
c. 480v Emergency Bus Undervoltage (Degraded Voltage)	+ 3% 90% - 0% of nominal bus voltage with a 90 ± 5 second time delay	$\geq 89\%$ of nominal bus voltage with a 90 ± 5 second time delay

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TABLE 3.3-4 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION TRIP SETPOINTS

<u>FUNCTIONAL UNIT</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUES</u>
7. AUXILIARY FEEDWATER		
a. Steam Generator Water Level-low-low	≥ 12% of narrow range instrument span each steam generator	≥ 1% of narrow range instrument span each steam generator
b. Undervoltage - RCP	≥ 2750 volts RCP bus voltage	≥ 2725 volts RCP bus voltage
c. S.I.	See 1 above (all SI Setpoints)	
d. Turbine Driven Pump Discharge Pressure Low	≥ 468 psig	≥ 452 psig
e. Emergency Bus Undervoltage	≤ 3350 volts	≤ 3325 volts
f. Trip of Main Feedwater Pumps	Not Applicable	Not Applicable

TABLE 3.3-5 (Continued)

ENGINEERED SAFETY FEATURES RESPONSE TIMES

<u>INITIATING SIGNAL-AND FUNCTION</u>	<u>RESPONSE TIME IN SECONDS</u>
11. <u>Steam Generator Water Level-Low-low</u>	
a. Motor-driven Auxiliary Feedwater Pumps**	60.0
b. Turbine-driven Auxiliary Feedwater Pumps***	60.0
12. <u>Undervoltage RCP</u>	
a. Turbine-driven Auxiliary Feedwater Pumps	60.0
13. <u>Emergency Bus Undervoltage</u>	
a. Motor-driven Auxiliary Feedwater Pumps	60.0
14. <u>Trip of Main Feedwater Pumps</u>	
a. Motor-driven Auxiliary Feedwater Pumps	60.0
15. <u>Turbine Driven Pump Discharge Pressure Low</u>	
a. Motor-driven Auxiliary Feedwater Pumps	60.0
NOTE: Response time for Motor-driven Auxiliary Feedwater Pumps on all S.I. signal starts	60.0

*** on 2/3 any Steam Generator
 ** on 2/3 in 2/3 Steam Generators

TABLE 3.3-5 (Continued)

TABLE NOTATION

- * Diesel generator starting and sequence loading delays included. Response time limit includes opening of valves to establish SI path and attainment of discharge pressure for centrifugal charging pumps and Low Head Safety Injection pumps.
 - # Diesel generator starting and sequence loading delays not included. Offsite power available. Response time limit includes opening of valves to establish SI path and attainment of discharge pressure for centrifugal charging pumps.
 - ## Diesel generator starting and sequence loading delays included. Response time limit includes opening of valves to establish SI path and attainment of discharge pressure for centrifugal charging pumps.
- (1) Feedwater system overall response time shall include verification of valve stroke times applicable to the feedwater valves shown for penetrations 76, 77 and 78 on Table 3.6-1.

TABLE 4.3-2 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

SURVEILLANCE REQUIREMENTS

<u>FUNCTIONAL UNIT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES IN WHICH SURVEILLANCE REQUIRED</u>
7. AUXILIARY FEEDWATER				
a. Steam Generator Water Level-Low-Low	S	R	M	1, 2, 3
b. Undervoltage - RCP	S	R	M	1, 2
c. S.I.	See 1 above (all SI surveillance requirements)			
d. Turbine-driven Pump Discharge Pressure Low	N/A	R	R	1, 2, 3
e. Emergency Bus Undervoltage	N/A	R	R	1, 2, 3
f. Trip of Ma'n Feedwater Pumps	N/A	N/A	R	1, 2, 3

TABLE 4.3-13 (Continued)

RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>SOURCE CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>
e. Sampler Flow Rate	D	N/A	R	Q
3. Reactor Building/Supplementary Leak Collection and Release System (RM-VS-107A & B)				
a. Noble Gas Activity Monitor	D	H(5), P(5)***	R(3)	Q(2)
b. Iodine Sampler Cartridge	W(6)	N/A	N/A	N/A
c. Particulate Activity Monitor	W	N/A	N/A	N/A
d. System Effluent Flow Rate Measuring Device (FR-VS-112)	D	N/A	R	Q
e. Sampler Flow Rate Measuring Device	D	N/A	R	Q
4. Waste Gas Decay Tanks Monitor				
a. Oxygen Monitor (O ₂ -AS-GH-110-1,2)	D	N/A	Q(4)	M
b. Radiation Monitor (RM-GW-101)	D**	H(5)	R(3)	Q(2)
c. Sampler Flow Rate Measuring Device	D**	N/A	R	Q

TABLE 4.3-13 (Continued)

TABLE NOTATION

- * During releases via this pathway
 - ** During Waste Gas Tank filling operations
 - *** During purging of Reactor Containment via this pathway
- (1) The CHANNEL FUNCTIONAL TEST shall also demonstrate that automatic isolation of this pathway and control room alarm annunciation occurs if any of the following conditions exist:
- a. Instrument indicates measured levels above the alarm/trip setpoint.
 - b. Downscale failure.
 - c. Instrument controls not set in operate mode.
- (2) The CHANNEL FUNCTIONAL TEST shall also demonstrate that control room alarm annunciation occurs if any of the following conditions exist:
- a. Instrument indicates measured levels above the alarm/trip setpoint.
 - b. Downscale failure.
 - c. Instrument controls not set in operate mode.
- (3) The initial CHANNEL CALIBRATION for radioactivity measurement instrumentation shall be performed using one or more of the reference standards certified by the National Bureau of Standards or using standards that have been obtained from suppliers that participate in measurement assurance activities with NBS. These standards should permit calibrating the system over its intended range of energy and rate capabilities. For subsequent CHANNEL CALIBRATION, sources that have been related to the initial calibration should be used, at intervals of at least once per eighteen months. This can normally be accomplished during refueling outages.

TABLE 4.3-13 (Continued)

RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>SOURCE CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>
e. Sampler Flow Rate	D	N/A	R	Q
3. Reactor Building/Supplementary Leak Collection and Release System (RM-VS-107A & B)				
a. Noble Gas Activity Monitor	D	M(5), P(5)***	R(3)	Q(2)
b. Iodine Sampler Cartridge	W(6)	N/A	N/A	N/A
c. Particulate Activity Monitor	W	N/A	N/A	N/A
d. System Effluent Flow Rate Measuring Device (FR-VS-112)	D	N/A	R	Q
e. Sampler Flow Rate Measuring Device	D	N/A	R	Q
4. Waste Gas Decay Tanks Monitor				
a. Oxygen Monitor (O ₂ -AS-GH-110-1,2)	D	N/A	Q(4)	M
b. Radiation Monitor (RM-GW-101)	D**	M(5)	R(3)	Q(2)
c. Sampler Flow Rate Measuring Device	D**	N/A	R	Q