



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. 130
License No. DPR-66

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Duquesne Light Company, et al. (the licensee) dated June 27, 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.

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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-66 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 130, 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 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



John F. Stolz, Director
Project Directorate I-4
Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: **SEP 23 1968**

ATTACHMENT TO LICENSE AMENDMENT NO. 130

FACILITY OPERATING LICENSE NO. DPR-66

DOCKET NO. 50-334

Replace the following pages of Appendix A (Technical Specifications) with the enclosed pages as indicated. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change.

Remove

3/4 3-12
3/4 3-13
3/4 3-19a
3/4 3-24a
3/4 3-27a
3/4 3-31a
3/4 4-2d

Insert

3/4 3-12
3/4 3-13
3/4 3-19a
3/4 3-24a
3/4 3-27a
3/4 3-31a
3/4 4-2d

TABLE 4.3-1, (CONTINUED)

REACTOR TRIP SYSTEMTM 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>
BEAVER VALLEY - UNIT 1	15. Steam Feedwater Flow Mismatch and Low Steam Generator Water Level	S	R	M	1, 2
	16. Undervoltage-Reactor Coolant Pumps	N.A.	R	M	1
	17. Underfrequency-Reactor Coolant Pumps	N.A.	R	M	1
3/4 3-12	18. Turbine Trip				
	a. Auto Stop Oil Pressure	N.A.	N.A.	S/U(1)	1, 2
	b. Turbine Stop Valve Closure	N.A.	N.A.	S/U(1)	1, 2
	19. Safety Injection Input from ESF	N.A.	N.A.	R	1, 2
	20. Reactor Coolant Pump Breaker Position Trip	N.A.	N.A.	R	N.A.
Amendment No. 83, 787, 130	21. Reactor Trip Breaker	N.A.	N.A.	M(5, 11) and S/U(1)	1, 2, 3*, 4*, 5*
	22. Automatic Trip Logic	N.A.	N.A.	M(5)	1, 2, 3*, 4*, 5*
	23. Reactor Trip System Interlocks				
	A. P-6	N.A.	N.A.	M(9)	1, 2
	B. P-8	N.A.	N.A.	M(9)	1
	C. P-9	N.A.	N.A.	M(9)	1
	D. P-10	N.A.	N.A.	M(9)	1
	E. P-13	N.A.	R	M(9)	1
	24. Reactor Trip Bypass Breakers	N.A.	N.A.	M(12), R(13), S/U(1)	1, 2, 3*, 4*, 5*

TABLE 4.3-1 (CONTINUED)

NOTATION

- * - With the reactor trip system breakers closed and the control rod drive system capable of rod withdrawal.
- (1) - If not performed in previous 7 days.
- (2) - Heat balance only, above 15% of RATED THERMAL POWER.
- (3) - Compare incore to excore axial imbalance above 15% of RATED THERMAL POWER. Recalibrate if absolute difference ≥ 3 percent.
- (4) - (Not Used)
- (5) - Each train tested every other month.
- (6) - Neutron detectors may be excluded from CHANNEL CALIBRATION.
- (7) - Below P-10.
- (8) - Below P-6.
- (9) - Required only when below Interlock Trip Setpoint.
- (10) - The CHANNEL FUNCTIONAL TEST shall independently verify the OPERABILITY of the undervoltage and shunt trip circuits for the Manual Reactor Trip Function. The test shall also verify the OPERABILITY of the Bypass Breaker trip circuit(s).
- (11) - The CHANNEL FUNCTIONAL TEST shall independently verify the OPERABILITY of the undervoltage and shunt trip attachments of the Reactor Trip Breakers.
- (12) - Local manual shunt trip prior to placing breaker in service.
- (13) - Automatic undervoltage trip.

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. any 2 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. Emergency Bus Under-voltage (Start Motor Driven Pumps)	1/bus	1	1	1, 2, 3	18
e. Trip of Main Feedwater Pumps - (Start Motor Driven Pumps)	1/pump	1	1	1, 2, 3	18

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	\geq 12% of narrow range instrument span each steam generator	\geq 11% of narrow range instrument span each steam generator
b. Undervoltage - RCP	\geq 2750 volts RCP bus voltage	\geq 2725 volts RCP bus voltage
c. S.I.	See 1 above (all SI Setpoints)	
d. Emergency Bus Undervoltage	\leq 3350 volts	\leq 3325 volts
e. 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
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 4.3-2 (CONTINUED)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

BEAVER VALLEY - UNIT 1

3/4 3-31a

Amendment No. 90, 130

<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. Emergency Bus Undervoltage	N/A	R	R	1, 2, 3
e. Trip of Main Feedwater Pumps	N/A	N/A	R	1, 2, 3

REACTOR COOLANT SYSTEM

SURVEILLANCE REQUIREMENTS

4.4.1.3.1 The required residual heat removal loop(s) shall be determined OPERABLE per Specification 4.0.5.

4.4.1.3.2 The required reactor coolant pump(s), if not in operation, shall be determined to be OPERABLE once per 7 days by verifying correct breaker alignments and indicated power availability.

4.4.1.3.3 The required steam generator(s) shall be determined OPERABLE by verifying secondary side level equivalent to 12% narrow range at least once per 12 hours.

4.4.1.3.4 At least one coolant loop shall be verified to be in operation and circulating reactor coolant at least once per 12 hours.



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

DUQUESNE LIGHT COMPANY

OHIO EDISON COMPANY

THE CLEVELAND ELECTRIC ILLUMINATING COMPANY

THE TOLEDO EDISON COMPANY

DOCKET NO. 50-412

BEAVER VALLEY POWER STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 6
License No. NPF-73

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Duquesne Light Company, et al. (the licensee) dated June 27, 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.

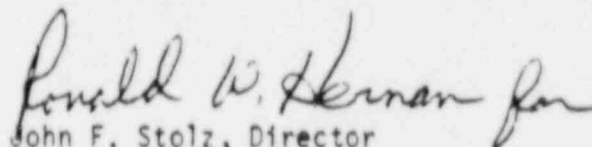
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-73 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 6, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance, to be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



John F. Stolz, Director
Project Directorate I-4
Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: SEP 23 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 6

FACILITY OPERATING LICENSE NO. NPF-73

DOCKET NO. 50-412

Replace the following pages of Appendix A (Technical Specifications) with the enclosed pages as indicated. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change.

Remove

3/4 3-20

3/4 3-27

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3/4 3-37

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Insert

3/4 3-20

3/4 3-27

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3/4 3-37

3/4 4-4

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 (Continued)					
d. Safety Injection (Start Motor-Driven Pumps)	See 1 above (all SI initiating functions and requirements)				
e. Trip of Main Feedwater Pumps (Start Motor Driven Pumps)	1/ pump	2	2	1, 2, 3	18
8. ENGINEERED SAFETY FEATURE INTERLOCKS					
a. Reactor Trip, P-4	2	1	2	1, 2, 3	45
b. Pressurizer Pressure, P-11	3	2	2	1, 2, 3	38
c. Low-Low T _{avg} , P-12	3	2	2	1, 2, 3	38

BEAVER VALLEY - UNIT 2

3/4 3-20

Amendment No. 6

TABLE 3.3-4 (Continued)

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION TRIP SETPOINTS

FUNCTIONAL UNIT	TOTAL ALLOWANCE (TA)	Z	SENSOR DRIFT (S)	TRIP SETPOINT	ALLOWABLE VALUE
7. AUXILIARY FEEDWATER (Continued)					
b. Steam Generator Water Level--Low-Low					
1. Start Turbine Driven Pump	11.5	10.18	1.67	> 11.5% of narrow range instrument span	> 10.7% of narrow range instrument span
2. Start Motor Driven Pumps	11.5	10.18	1.67	> 11.5% of narrow range instrument span	> 10.7% of narrow range instrument span
c. Undervoltage - RCP (Start Turbine Driven Pump)	27.7	1.39	0.0	> 75% of nominal bus voltage	> 73% of nominal bus voltage
d. Safety Injection (Start Motor-Driven Pumps)	See Item 1. above for all Safety Injection Trip Setpoints and Allowable Values.				
e. Trip of Main Feedwater Pumps (Start Motor-Driven Pumps)	N.A.	N.A.	N.A.	N.A.	N.A.

TABLE 3.3-5 (Continued)

<u>ENGINEERED SAFETY FEATURES RESPONSE TIMES</u>	
<u>INITIATING SIGNAL AND FUNCTION</u>	<u>RESPONSE TIME IN SECONDS</u>
9. <u>Loss of Power</u>	
a. 4.16kv Emergency Bus Undervoltage (Loss of Voltage) (Trip Feeder)	1 ± 0.1 sec.
b. 4.16kv and 480v Emergency Bus Under- voltage (Degraded Voltage)	90 ± 5 sec.
10. (Intentionally blank)	
11. <u>Steam Generator Water Level-Low-Low</u>	
a. Motor-driven Auxiliary Feedwater Pump**	≤ 60.0
b. Turbine-driven Auxiliary Feedwater Pump***	≤ 60.0
12. <u>Undervoltage RCP</u>	
a. Turbine-driven Auxiliary Feedwater Pump	≤ 60.0
13. <u>Trip of Main Feedwater Pumps</u>	
a. Motor-driven Auxiliary Feedwater Pumps	≤ 60.0
14. Control Room High Radiation	
a. Control Room Ventilation Isolation	≤ 180(6)

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

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 (continued)				
d. Safety Injection (Start Motor-Driven Pumps)	See 1 above (all SI surveillance requirements)			
e. Trip of Main Feedwater Pumps (Start Motor-Driven Pumps)	N.A.	N.A.		1, 2, 3
8. ENGINEERED SAFETY FEATURE INTERLOCKS				
a. Reactor Trip, P-4	N.A.	N.A.	R	1, 2, 3
b. Pressurizer Pressure, P-11	N.A.	R	M	1, 2, 3
c. Low-Low T_{avg} , P-12	N.A.	R	M	1, 2, 3

REACTOR COOLANT SYSTEM

SURVEILLANCE REQUIREMENTS

4.4.1.3.1 The required residual heat removal loop(s) shall be determined OPERABLE per Specification 4.0.5.

4.4.1.3.2 The required reactor coolant pump(s), if not in operation, shall be determined to be OPERABLE once per 7 days by verifying correct breaker alignments and indicated power availability.

4.4.1.3.3 The required steam generator(s) shall be determined OPERABLE by verifying secondary side level greater than or equal to 15.5 percent narrow range at least once per 12 hours.

4.4.1.3.4 At least one coolant loop shall be verified to be in operation and circulating reactor coolant at least once per 12 hours.