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. 28
License No. DPR-66

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

   A. The applications for amendment by Duquesne Light Company, Ohio Edison Company, and Pennsylvania Power Company (the licensees) dated November 17, 1977, May 16, August 3, September 11 and October 24, 1978, September 28 and October 18, 1979, February 27, July 3, August 6 and August 11, 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-66 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 28 , 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

for Marshall Grotenhuis

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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 27, 1980

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 28 TO FACILITY OPERATING LICENSE NO. DPR-66

DOCKET NO. 50-334

Revise Appendix A as follows:

Remove Pages	Insert Pages
3/4 1-16	3/4 1-16
	3/4 1-16a
3/4 3-16a	3/4 3-22a
3/4 3-22a	3/4 3-29a
3/4 3-29a	3/4 5-9
3/4 5-9	3/4 6-11
3/4 6-11	3/4 6-15
3/4 6-15	3/4 6-16
3/4 6-16	
B 3/4 1-2	B 3/4 1-2

REACTIVITY CONTROL SYSTEMS

BORATED WATER SOURCES - OPERATING

LIMITING CONDITION FOR OPERATION

3.1.2.8 Each of the following borated water sources shall be OPERABLE:

a. A boric acid storage system with:

1. A minimum contained volume of 11,336 gallons,

2. Between 7000 and 7700 ppm of boron, and

3. A minimum solution temperature of 65°F.

b. The refueling water storage tank with:

1. A minimum contained volume of 439,050 gallons of water,

2. A minimum boron concentration of 2000 ppm, and

3. A minimum solution temperature of 43°F.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

a. With the boric acid storage system inoperable, restore the storage system to OPERABLE status within 72 hours or be in at least HOT STANDBY and borated to a SHUTDOWN MARGIN equivalent to at least 1% Δk/k at 200°F within the next 6 hours; restore the boric acid storage system to OPERABLE status within the next 7 days or be in COLD SHUTDOWN within the next 30 hours.

b. With the refueling water storage tank inoperable, restore the tank to OPERABLE status within one hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.1.2.8 Each borated water source shall be demonstrated OPERABLE:

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ACTION
1.1 SAFETY INJECTION-TRANSFER FROM INJECTION TO THE RE-CIRCULATION MODE					
a. Manual Initiation	2 sets 2 switches/set	1 set	2 sets	1, 2, 3, 4	18
b. Automatic Actuation Logic Coincident with Safety Injection Signal	2	1	2	1, 2, 3	18
c. Refueling Water Storage Tank Level-Low	4	2	3	1, 2, 3	16
d. Refueling Water Storage Tank Level - Auto QS Flow Reduction	1 per train	1 per train	1 per train	1, 2, 3	18

TABLE 3.3-4 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION TRIP SETPOINTS

FUNCTIONAL UNIT	TRIP SETPOINT	ALLOWABLE VALUES
1.1 SAFETY INJECTION-TRANSFER FROM INJECTION TO THE RECIRCULATION MODE		
a. Manual Initiation	Not Applicable	Not Applicable
b. Automatic Actuation Logic Coincident with Safety Injection Signal	Not Applicable	Not Applicable
c. Refueling Water Storage Tank Level-Low	19'2-1/2" ± 0'6"	19'2-1/2" ± 1'0"
d. Refueling Water Storage Tank Level - Auto QS Flow Reduction	11'0" ± 3"	11'0" ± 6"

TABLE 4.3-2 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	MODES IN WHICH SURVEILLANCE REQUIRED
1.1. SAFETY INJECTION-TRANSFER FROM INJECTION TO THE RE-RECIRCULATION MODE				
a. Manual Initation	N.A.	N.A.	M (1)	1, 2, 3, 4
b. Automatic Actuation Logic Coincident with Safety Injection Signal	N.A.	N.A.	M (2)	1, 2, 3
c. Refueling Water Storage Tank Level-Low	S	R	M	1, 2, 3
d. Refueling Water Storage Tank Level - Auto QS Flow Reduction	S	R	M	1, 2, 3
2. CONTAINMENT SPRAY				
a. Manual Initiation	N.A.	N.A.	M (1)	1, 2, 3, 4
b. Automatic Actuation Logic	N.A.	N.A.	M (2)	1, 2, 3, 4
c. Contain Pressure-High-High	S	R	M	1, 2, 3

EMERGENCY CORE COOLING SYSTEMS

REFUELING WATER STORAGE TANK

LIMITING CONDITION FOR OPERATION

3.5.5 The refueling water storage tank shall be OPERABLE with:

a. A contained volume of between 439,050 and 441,100 gallons of borated water.
b. A boron concentration of between 2000 and 2100 ppm, and
c. A minimum water temperature of 43°F.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With the refueling water storage tank inoperable, restore the tank to OPERABLE status within 1 hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.5.5 The RWST shall be demonstrated OPERABLE:

a. At least once per 7 days by:
   1. Verifying the water level in the tank, and
   2. Verifying the boron concentration of the water.
b. At least once per 24 hours by verifying the RWST temperature when the RWST ambient air temperature is < 43°F.

CONTAINMENT SYSTEMS

3/4.6.2 DEPRESSURIZATION AND COOLING SYSTEMS

CONTAINMENT QUENCH SPRAY SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.2.1 Two separate and independent containment quench spray subsystems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one containment quench spray subsystem inoperable, restore the inoperable subsystem to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.2.1 Each containment quench spray subsystem shall be demonstrated OPERABLE:

a. At least once per 31 days on a STAGGERED TEST BASIS by:

1. Starting each spray pump,

2. Verifying, that on recirculation flow, when tested in accordance with the requirements of Section 4.0.5, each quench spray pump develops a discharge pressure of $\geq$153 psig at a flow of $\geq$ 1550 gpm,

3. Verifying that each spray pump operates for at least 15 minutes,

4. Cycling each testable power operated or automatic valve in the flow path through at least one complete cycle of full travel.

CONTAINMENT SYSTEMS

CHEMICAL ADDITION SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.2.3 The chemical addition system shall be OPERABLE with:

a. A chemical addition tank containing at least 4700 gallons of between 19.5 and 20 percent by weight NaOH solution, and

b. Four chemical injection pumps each capable of adding NaOH solution from the chemical addition tank to a containment quench spray system pump flow.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With the chemical addition system inoperable, restore the system to OPERABLE status within 72 hours or be in HOT STANDBY within the next 6 hours; restore the chemical addition system to OPERABLE status within the next 48 hours or be in COLD SHUTDOWN within the next 36 hours.

SURVEILLANCE REQUIREMENTS

4.6.2.3 The chemical addition system shall be demonstrated OPERABLE:

a. At least once per 31 days by verifying that each valve (manual, power-operated, or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.

b. At least once per 31 days on a STAGGERED TEST BASIS by:

1. Starting each injection pump.

2. Verifying that each injection pump operates for at least 15 minutes.

3. Cycling each testable power-operated or automatic valve in the flow path through at least one complete cycle of full travel.

4. Verify that on recirculation, each injection pump develop a flow between 31 and 34 gpm.

SURVEILLANCE REQUIREMENTS (Continued)

c. At least once per 18 months, during shutdown, by:

1. Cycling each valve in the chemical addition system flow path that is not testable during plant operation, through at least one complete cycle of full travel.

2. Verifying that each automatic valve in the flow path actuates to its correct position on a test signal.

3/4.1.1.4 MODERATOR TEMPERATURE COEFFICIENT (MTC) (Continued)

fuel cycle. The surveillance requirement for measurement of the MTC at the beginning and near the end of each fuel cycle is adequate to confirm the MTC value since this coefficient changes slowly due principally to the reduction in RCS boron concentration associated with fuel burnup.

3/4.1.1.5 MINIMUM TEMPERATURE FOR CRITICALITY

This specification ensures that the reactor will not be made critical with the Reactor Coolant System average temperature less than 541°F. This limitation is required to ensure 1) the moderator temperature coefficient is within its analyzed temperature range, 2) the pressurizer is capable of being in an OPERABLE status with a steam bubble, 3) the reactor pressure vessel is above its minimum NDTT temperature and 4) the protective instrumentation is within its normal operating range.

3/4.1.2 BORATION SYSTEMS

The boron injection system ensures that negative reactivity control is available during each mode of facility operation. The components required to perform this function include 1) borated water sources, 2) charging pumps, 3) separate flow paths, 4) boric acid transfer pumps, 5) associated heat tracing systems, and 6) an emergency power supply from OPERABLE diesel generators.

With the RCS average temperature above 200°F, a minimum of two separate and redundant boron injection systems are provided to ensure single functional capability in the event an assumed failure renders one of the systems inoperable. Allowable out-of-service periods ensure that minor component repair or corrective action may be completed without undue risk to overall facility safety from injection system failures during the repair period.

The required volume of water in the refueling water storage tank for reactivity considerations while operating is 424,000 gallons. The associated technical specification limit on the refueling water storage tank has been established at 441,100 gallons to account for reactivity considerations and the NPSH requirements of the ECCS system.