December 7, 1987

Docket No. 50-334

Mr. J. D. Sieber, Vice President
Nuclear Operations
Duquesne Light Company
Post Office Box 4
Shippingport, PA 15077

Dear Mr. Sieber:

Subject: Issuance of Amendment (Licensing Action TAC 64791)

The Commission has issued the enclosed Amendment No. 120 to Facility Operating License No. DPR-66 for the Beaver Valley Power Station, Unit No. 1. The amendment consists of changes to the Technical Specifications in response to your application dated February 24, 1987.

The amendment changes the Technical Specifications for Beaver Valley Unit No. 1 to incorporate a number of changes in the areas of instrumentation and administrative controls. In addition, as stated in detail in the enclosed Safety Evaluation, we will take no action on one requested change until you determine an appropriate course of action.

The Notice of Issuance will be included in the Commission's bi-weekly Federal Register notice.

Sincerely,

Original signed by

Peter S. Tam, Project Manager
Project Directorate I-4
Division of Reactor Projects I/II

Enclosures:
1. Amendment No. 120 to DPR-66
2. Safety Evaluation

cc w/enclosures:
See next page

DISTRIBUTION:

Docket File	J. Partlow
NRC & Local PDRs	T. Barnhart (4)
PDI-4 Reading	Wanda Jones
S. Varga	E. Butcher
B. Boger	PDFiles
S. Norris	EJordan
P. Tam	ACRS (10)
OGC-Bethesda	GPA/PA
D. Hagan	ARM/LFMB

LAPDI-4	PDI-4	PDI-4	OGC-Beth
SNorris	PTam:1m	JStolz	MYoung
11/10/87	11/10/87	12/1/87	11/13/87

to SE. Check SECY before issuance

cc:
Mr. W. S. Lacey
Station Superintendent
Duquesne Light Company
Beaver Valley Power Station
Post Office Box 4
Shippingport, Pennsylvania 15007

Mr. Kenneth Grada, Manager
Safety and Licensing
Duquesne Light Company
Post Office Box 4
Shippingport, Pennsylvania 15077

Mr. John A. Levin
Public Utility Commission
Post Office Box 3265
Harrisburg, Pennsylvania 17120

Gerald Charnoff, Esquire
Jay E. Silberg, Esquire
Shaw, Pittman, Potts and Trowbridge
2300 N Street, N.W.
Washington, DC 20037

Charles E. Thomas, Esquire
Thomas and Thomas
212 Locust Street
Box 999
Harrisburg, Pennsylvania 17108

Marvin Fein
Utility Counsel
City of Pittsburgh
313 City-County Building
Pittsburg, Pennsylvania 15219

Resident Inspector
U.S. Nuclear Regulatory Commission
Post Office Box 298
Shippingport, Pennsylvania 15077

Pennsylvania Power Company
James R. Edgerly
Post Office Box 891
New Castle, Pennsylvania 16103

Mr. W. F. Carmichael, Commissioner
State of West Virginia Department
of Labor
1800 Washington Street, East
Charleston, West Virginia 25305

David K. Heydinger, M.D.
State Director of Health
State Department of Health
1800 Washington Street, East
Charleston, West Virginia 25305

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

Mr. R. Janati
Bureau of Radiation Protection
Pennyslvania Department of
Environmental Resources
P.O. Box 2063
Harrisburg, Pennsylvania 17120

John D. Burrows, P.E.
Director of Utilities
State of Ohio
Public Utilities Commission
180 East Broad Street
Columbus, Ohio 43266-0573

Pennsylvania Office of Consumer
Advocate
ATTN: Michael Bardee
1425 Strawberry Square
Harrisburg, Pennsylvania 17120

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. 120
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 licensee) dated February 24, 1987 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:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 120, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This amendment is effective on issuance, to be implemented no later than 30 days after issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

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

Attachment:
Changes to the Technical Specifications

Date of Issuance: December 7, 1987

ATTACHMENT TO LICENSE AMENDMENT NO. 120

FACILITY OPERATING LICENSE NO. DPR-66

DOCKET NO. 50-334

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

Remove	Insert
3/4 2-6a	3/4 2-6a
3/4 3-2	3/4 3-2
3/4 3-27	3/4 3-27
3/4 3-28	3/4 3-28
3/4 3-35	3/4 3-35
3/4 3-38	3/4 3-38
3/4 3-46	3/4 3-46
3/4 4-10d	3/4 4-10d
3/4 5-3	3/4 5-3
3/4 5-6	3/4 5-6
3/4 6-1	3/4 6-1
6-11	6-11
6-12	6-12
6-22	6-22
6-24	6-24

SURVEILLANCE REQUIREMENTS (Continued)

2. When the F_{xy}^{C} is less than or equal to the F_{xy}^{RTP} limit for the appropriate measured core plane, additional power distribution maps shall be taken and F_{xy}^{C} compared to F_{xy}^{RTP} and F_{xy}^{L} at least once per 31 EFPD.

e. The F_{xy} limit for Rated Thermal Power (F_{xy}^{RTP}) shall be provided for all core planes containing bank "D" control rods and all unrodded core planes in a Radial Peaking Factor Limit Report per specification 6.9.1.14.

f. The F_{xy} limits of e, above, are not applicable in the following core plane regions as measured from the bottom of the fuel:

1. Lower core region from 0 to 15%, inclusive.

2. Upper core region from 85 to 100%, inclusive.

3. Grid plane regions $\pm 2\%$ of core height (± 2.88 inches) measured from grid centerline.

4. Core plane regions within $\pm 2\%$ of core height (± 2.88 inches) about the bank demand position of the bank "D" control rods.

g. With F_{xy}^{C} exceeding F_{xy}^{L}, the effects of F_{xy} on F_Q (Z) shall be evaluated to determine if F_Q (Z) is within its limit.

4.2.2.3 When F_Q (Z) is measured pursuant to Specification 4.10.2.2, an overall measured F_Q (Z) shall be obtained from a power distribution map and increased by 3% to account for manufacturing tolerances and further increased by 5% to account for measurement uncertainty.

TABLE 3.3-1

REACTOR TRIP SYSTEM INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ACTION
1. Manual Reactor Trip	2	1	2	1, 2, 3*, 4*, and 5*	12
2. Power Range, Neutron Flux					
a. High Setpoint	4	2	3	1, 2	2
b. Low Setpoint	4	2	3	1(1), 2	2
3. Power Range, Neutron Flux High Positive Rate	4	2	3	1, 2	2
4. Power Range, Neutron Flux High Negative Rate	4	2	3	1, 2	2
5. Intermediate Range, Neutron Flux	2	1	2	1(1), 2, 3*, 4* and 5*	3
6. Source Range, Neutron Flux (Below P-10)					
a. Startup	2	1	2	2(2), 3*, 4*, and 5*	4
b. Shutdown	2	0	1	3, 4, and 5	5
7. Overtemperature ΔT					
Three Loop Operation	3	2	2	1, 2	7
Two Loop Operation	3	1**	2	1, 2	9
8. Overpower ΔT					
Three Loop Operation	3	2	2	1, 2	7
Two Loop Operation	3	1**	2	1, 2	9
9. Pressurizer Pressure-Low (Above P-7)	3	2	2	1, 2	7

TABLE 3.3-5 (Continued)

ENGINEERED SAFETY FEATURES RESPONSE TIMES

INITIATING SIGNAL AND FUNCTION	RESPONSE TIME IN SECONDS
4. Steam Line Pressure-Low	
a. Safety Injection (ECCS)	$\leq$ 13.0#/23.0##
b. Reactor Trip (from SI)	$\leq$ 3.0
c. Feedwater Isolation	$\leq$ 75.0(1)
d. Containment Isolation-Phase "A"	$\leq$ 22.0#/33.0##
e. Auxiliary Feedwater Pumps	Not Applicable
f. Rx Plant River Water System	$\leq$ 77.0#/110.0##
g. Steam Line Isolation	$\leq$ 8.0
5. Containment Pressure--High-High	
a. Containment Quench Spray	$\leq$ 77.0
b. Containment Isolation-Phase "B"	Not Applicable
c. Control Room Ventilation Isolation	$\leq$ 22.0#/77.0##
6. Steam Generator Water Level--High-High	
a. Turbine Trip-Reactor Trip (Above P-9)	$\leq$ 2.5
b. Feedwater Isolation	$\leq$ 13.0(2)
7. Containment Pressure--Intermediate High-High	
a. Steam Line Isolation	$\leq$ 8.0
8. Steamline Pressure Rate--High Negative	
a. Steamline Isolation	$\leq$ 8.0
9. Loss of Power	
a. 4.16kv Emergency Bus Undervoltage (Loss of Voltage)	$\leq$ 1.3
b. 4.16kv and 480v Emergency Bus Under-voltage (Degraded Voltage)	$\leq$ 95

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.

(2) The 13.0 second response time includes 3 seconds for signal processing and 10 seconds for feedwater flow control valve stroke/closing time (see Table 3.6-1 FCV-1FW-478, 488 and 498).

TABLE 3.3-6 (Continued)

ACTION STATEMENTS

ACTION 19 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, perform area surveys of the monitored area with portable monitoring instrumentation at lease once per 24 hours.

ACTION 20 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, comply with the ACTION requirements of Specification 3.4.6.1.

ACTION 21 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, comply with the applicable ACTION requirements of Specifications 3.9.12 and 3.9.13.

ACTION 22 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, comply with the ACTION requirements of Specification 3.9.9.

ACTION 36 - With the number of OPERABLE channels less than required by the Minimum Channels OPERABLE requirement, either restore the inoperable Channel(s) to OPERABLE status within 72 hours, or:

a) Initiate the preplanned alternate method of monitoring the appropriate parameter(s), and

b) Return the channel to OPERABLE status within 30 days, or, explain in the next Semi-Annual Effluent Release Report why the inoperability was not corrected in a timely manner.

ACTION 41 - a) With the number of Unit 1 OPERABLE channels one less than the Minimum Channels OPERABLE requirement:

1. Verify the respective Unit 2 control room radiation monitor train is OPERABLE within 1 hour and at least once per 31 days.

2. With the respective Unit 2 control room radiation monitor train inoperable, suspend all operations involving movement of irradiated fuel within 1 hour and restore the Unit 1 control room radiation monitor to OPERABLE status within 7 days or isolate the control room from the outside atmosphere by closing all series air intake and exhaust isolation dampers, unless the respective Unit 2 control room radiation monitor train is restored to OPERABLE status within 7 days.

LIMITING CONDITION FOR OPERATION

3.3.3.3 The seismic monitoring instrumentation shown in Table 3.3-7 shall be OPERABLE.

APPLICABILITY: At all times.

ACTION:

a. With the number of OPERABLE seismic monitoring instruments less than required by Table 3.3-7, restore the inoperable instrument(s) to OPERABLE status within 30 days.

b. With one or more seismic monitoring instruments inoperable for more than 30 days, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 10 days outlining the cause of the malfunction and the plans for restoring the instrument(s) to OPERABLE status.

c. The provisions of Specification 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.3.1 Each of the above seismic monitoring instruments shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION and CHANNEL FUNCTIONAL TEST operations at the frequencies shown in Table 4.3-4.

4.3.3.3.2 A seismic event greater than or equal to 0.01g shall be reported to the Commission within 1 hour. Each of the above seismic monitoring instruments actuated during a seismic event greater than or equal to 0.01g shall be restored to OPERABLE status within 24 hours and a CHANNEL CALIBRATION performed within 30 days following the seismic event. Data shall be retrieved from actuated instruments and analyzed to determine the magnitude of the vibratory ground motion. A Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 30 days describing the magnitude, frequency spectrum and resultant effect upon facility features important to safety.

TABLE 4.3-6

REMOTE SHUTDOWN MONITORING INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION
1. Intermediate Range Nuclear Flux	M	N.A.
2. Intermediate Range Startup Rate	M	N.A.
3. Source Range Nuclear Flux (1)	M(4)	N.A.
4. Source Range Startup Rate (1)	M(4)	N.A.
5. Reactor Coolant Temperature - Hot Leg	M	R
6. Reactor Coolant Temperature - Cold Leg	M	R
7. Pressurizer Pressure	M	R
8. Pressurizer Level	M	R
9. Steam Generator Pressure	M	R
10. Steam Generator Level	M	R
11. RHR Temperature - HX Outlet(3)	M(5)	R
12. Auxiliary Feedwater Flow Rate	S/U(2)	R

Notation

(1) Operability required in accordance with Specification 3.3.1.1.
(2) Channel check to be performed in conjunction with Surveillance Requirement 4.7.1.2.a.9 following an extended plant outage.
(3) Operability required in accordance with Specification 3.4.1.3.
(4) Below P-6.
(5) Channel check to be performed in conjunction with Surveillance Requirement 4.4.1.3.1.

TABLE 4.4-2

STEAM GENERATOR TUBE INSPECTION

1ST SAMPLE INSPECTION			2ND SAMPLE INSPECTION		3RD SAMPLE INSPECTION	
Sample Size	Result	Action Required	Result	Action Required	Result	Action Required
A minimum of S Tubes per S. G.	C-1	None	N/A	N/A	N/A	N/A
	C-2	Plug defective tubes and inspect additional 2S tubes in this S. G.	C-1	None	N/A	N/A
			C-2	Plug defective tubes and inspect additional 4S tubes in this S. G.	C-1	None
					C-2	Plug defective tubes
					C-3	Perform action for C-3 result of first sample
			C-3	Perform action for C-3 result of first sample	N/A	N/A
	C-3	Inspect all tubes in this S. G., plug defective tubes and inspect 2S tubes in each other S. G. Notification to NRC pursuant to Specification 6.6.	All other S.G.s are C-1	None	N/A	N/A
			Some S.G.s C-2 but no additional S.Gs are C-3	Perform action for C-2 result of second sample	N/A	N/A
			Additional S.G. is C-3	Inspect all tubes in each S.G. and plug defective tubes. Notification to NRC pursuant to Specification 6.6.	N/A	N/A

$S = 3\frac{N}{n}\%$ Where N is the number of steam generators in the unit, and n is the number of steam generators inspected during an inspection.

LIMITING CONDITION FOR OPERATION

3.5.2 Two separate and independent ECCS subsystems shall be OPERABLE with each subsystem comprised of:

a. One OPERABLE centrifugal charging pump,

b. One OPERABLE low head safety injection pump, and

c. An OPERABLE flow path capable of taking suction from the refueling water storage tank on a safety injection signal and transferring suction to the containment sump during the recirculation phase of operation.

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

a. With one ECCS subsystem inoperable, restore the inoperable subsystem to OPERABLE status within 72 hours or be in HOT SHUTDOWN within the next 12 hours.

b. In the event the ECCS is actuated and injects water into the Reactor Coolant System, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 30 days describing the circumstances of the actuation and the total accumulated actuation cycles to date.

ECCS SUBSYSTEMS T_{avg} <350F

LIMITING CONDITION FOR OPERATION

3.5.3 As a minimum, one ECCS subsystem comprised of the following shall be OPERABLE:

a. One OPERABLE centrifugal charging pump,#

b. One OPERABLE Low Head Safety Injection Pump, and

c. An OPERABLE flow path capable of taking suction from the refueling water storage tank upon being manually realigned and transferring suction to the containment sump during the recirculation phase of operation.

APPLICABILITY: MODE 4

ACTION:

a. With no ECCS subsystem OPERABLE because of the inoperability of either the centrifugal charging pump or the flow path from the refueling water storage tank, restore at least one ECCS subsystem to OPERABLE status within 1 hour or be in COLD SHUTDOWN within the next 20 hours.

b. In the event the ECCS is actuated and injects water into the Reactor Coolant System, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 30 days describing the circumstances of the actuation and the total accumulated actuation cycles to date.

SURVEILLANCE REQUIREMENTS

4.5.3.1 The ECCS subsystem shall be demonstrated OPERABLE per the applicable Surveillance Requirements of 4.5.2.

4.5.3.2 All charging pumps except the above required OPERABLE pumps, shall be demonstrated inoperable at least once per 12 hours whenever the temperature of one or more of the non-isolated RCS cold legs is ≤ 275°F by verifying that the control switches are placed in the PULL-TO-LOCK position and tagged.

\# A maximum of one centrifugal charging pump shall be OPERABLE whenever the temperature of one or more of the non-isolated RCS cold legs is ≤ 275°F.

3/4.6 CONTAINMENT SYSTEMS

3/4.6.1 PRIMARY CONTAINMENT

CONTAINMENT INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.1.1 Primary CONTAINMENT INTEGRITY shall be maintained.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

Without primary CONTAINMENT INTEGRITY, restore CONTAINMENT INTEGRITY within one hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 36 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.1 Primary CONTAINMENT INTEGRITY shall be demonstrated:

a. At least once per 31 days by verifying that:

1. All penetrations* not capable of being closed by OPERABLE containment automatic isolation valves and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic valves secured in their positions, except as provided in Table 3.6-1 of Specification 3.6.3.1.

2. All equipment hatches are closed and sealed.

b. By verifying that each containment air lock is OPERABLE per Specification 3.6.1.3.

---

* Except valves, blind flanges, and deactivated automatic valves which are located inside the containment and are locked, sealed, or otherwise secured in the closed position. These penetrations shall be verified closed during each COLD SHUTDOWN except that such verification need not be performed more often than once per 92 days.

AUDITS (Continued)

6.5.2.9 The ORC shall report to and advise the Senior Vice President, Nuclear Group on those areas of responsibility specified in Section 6.5.2.7 and 6.5.2.8.

RECORDS

6.5.2.10 Records of ORC activities shall be prepared, approved and distributed as indicated by the following:

a. Minutes of each ORC meeting shall be prepared for and approved by the ORC Chairman or Vice-Chairman within 14 days following each meeting.

b. Reports of reviews encompassed by Section 6.5.2.7 above, shall be documented in the ORC meeting minutes.

c. Audit reports encompassed by Section 6.5.2.8 above, shall be forwarded to the Senior Vice President, Nuclear Group and to the management positions responsible for the areas audited within 30 days after completion of the audit.

6.6 REPORTABLE EVENT ACTION

6.6.1 The following actions shall be taken for REPORTABLE EVENTS:

a. The Commission shall be notified in accordance with 10 CFR 50.72 and/or a report be submitted pursuant to the requirements of Section 50.73 to 10CFR Part 50, and

b. Each REPORTABLE EVENT shall be reviewed by the OSC, and results of this review shall be submitted to the ORC.

6.7 SAFETY LIMIT VIOLATION

6.7.1 The following actions shall be taken in the event a Safety Limit is violated:

a. The facility shall be placed in at least HOT STANDBY within one (1) hour.

b. The Safety Limit violation shall be reported to the Commission within one hour and to the Senior Manager Nuclear Operations and to the ORC within 24 hours.

SAFETY LIMIT VIOLATION (Continued)

c. A Safety Limit Violation Report shall be prepared. The report shall be reviewed by the On-Site Safety Committee (OSC). This report shall describe (1) applicable circumstances preceding the violation, (2) effects of the violation upon facility components, systems or structures, and (3) corrective action taken to prevent recurrence.

d. The Safety Limit Violation Report shall be submitted to the Commission, the ORC and the Senior Manager, Nuclear Operations within 30 days of the violation.

6.8 PROCEDURES

6.8.1 Written procedures shall be established, implemented, and maintained covering the activities referenced below:

a. The applicable procedures recommended in Appendix "A" of Regulatory Guide 1.33, Revision 2, February 1978.

b. Refueling operations.

c. Surveillance and test activities of safety related equipment.

d. Security Plan implementation.

e. Emergency Plan implementation.

f. Fire Protection Program implementation.

g. PROCESS CONTROL PROGRAM implementation.

h. OFFSITE DOSE CALCULATION MANUAL implementation.

6.8.2 Each procedure and administrative policy of 6.8.1 above and changes of intent thereto, shall be reviewed by the OSC and approved by the Plant Manager, predesignated alternate or a predesignated Manager to whom the Plant Manager has assigned in writing the responsibility for review and approval of specific subjects considered by the committee, as applicable. Changes to procedures and administrative policies of 6.8.1 above that do not receive OSC review, such as correcting typographical errors, reformatting procedures and other changes not affecting the purpose for which the procedure is performed shall receive an independent review by a qualified individual and approved by a designated manager or director.

The radioactive effluent release report to be submitted 60 days after January 1 of each year shall also include an assessment of radiation doses to the likely most exposed real individual from reactor releases for the previous calendar year to show conformance with 40 CFR 190, Environmental Radiation Protection Standards for Nuclear Power Operation. Acceptable methods for calculating the dose contribution from liquid and gaseous effluents are given in Regulatory Guide 1.109, Revision 1. The SKYSHINE Code (available from Radiation Shielding Information Center, ORNL) is acceptable for calculating the dose contribution from direct radiation due to N-16.

The radioactive effluent release reports shall include an assessment of radiation doses from the radioactive liquid and gaseous effluents released from the unit during each calendar quarter as outlined in Regulatory Guide 1.21. In addition, the unrestricted area boundary maximum noble gas gamma air and beta air doses shall be evaluated. The assessment of radiation doses shall be performed in accordance with the ODCM.

The radioactive effluent release reports shall also include any licensee initiated changes to the ODCM made during the 6 month period.

RADIAL PEAKING FACTOR LIMIT REPORT

6.9.1.14 The F_{xy} limit for Rated Thermal Power (F_{xy}^{RTP}) shall be provided to the Regional Administrator of the Regional Office of the NRC, with a copy to the Director, Nuclear Reactor Regulation, U. S. Nuclear Regulatory Commission, Washington, DC 20555 for all core planes containing bank "D" control rods and all unrodded core planes at least 60 days prior to cycle initial criticality. In the event that the limit would be submitted at some other time during core life, it will be submitted 60 days prior to the date the limit would become effective unless otherwise exempted by the Commission.

Any information needed to support F_{xy}^{RTP} will be by request from the NRC and need not be included in this report.

SPECIAL REPORTS

6.9.2 Special reports shall be submitted to the Regional Administrator of the Regional Office of the NRC within the time period specified for each report. These reports shall be submitted covering the activities identified below pursuant to the requirements of the applicable reference specification:

6.10.2 The following records shall be retained for the duration of the Facility Operating License:

a. Records and drawing changes reflecting facility design modifications made to systems and equipment described in the Final Safety Analysis Report.

b. Records of new irradiated fuel inventory, fuel transfers and assembly burnup histories.

c. Records of facility radiation and contamination surveys.

d. Records of radiation exposure for all individuals entering radiation control areas.

e. Records of gaseous and liquid radioactive material released to the environs.

f. Records of transient or operational cycles for those facility components designed for a limited number of transients or cycles.

g. Records of training and qualification for current members of the plant staff.

h. Records of in-service inspections performed pursuant to these Technical Specifications.

i. Records of Quality Assurance activities required by the QA Manual.

j. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR 50.59.

k. Records of meetings of the OSC and the ORC.

l. Records of the service lives of all hydraulic and mechanical snubbers including the date at which the service life commences and associated installation and maintenance records.

m. Records of analyses required by the Radiological Environmental Monitoring Program.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 120 TO FACILITY OPERATING LICENSE NO. DPR-66

DUQUESNE LIGHT COMPANY

OHIO EDISON COMPANY

PENNSYLVANIA POWER COMPANY

BEAVER VALLEY POWER STATION, UNIT NO. 1

DOCKET NO. 50-334

1.0 INTRODUCTION

By letter dated February 24, 1987, Duquesne Light Company (the licensee) submitted change request No. 122 for our review. The proposed changes would either correct an error, clarify certain formats, make the Technical Specifications (TS) consistent with the Commission's regulations, or make the TS requirements consistent with each other.

2.0 DISCUSSION AND EVALUATION

1. Section 3.2.2 The BV-1 core contains fuel assembles with three different fuel rod end plugs. The variation in end plug size acts to change the location of the fuel assembly grids in relation to the bottom of the core. Thus the second grid is located at the following elevation in percent of core height for the various fuel regions:

Region 1,2,3,4	Region 5,6	Region 7,8
17.8%	17.9%	18.0%

The proposed change revises surveillance requirement 4.2.2.2.f to specify a generic grid location in lieu of a specific grid location to allow a more accurate application of the grid plane regions in accordance with the applicable fuel rod end plug used. This would affect the current grid elevation by up to 0.2% (18.0% - 17.8%) but this difference is well within the allowed tolerance of ± 2%. As a result, the fuel assembly descriptions in the updated FSAR will not be affected. The revision will also make the Technical Specifications of Unit 1 and Unit 2 consistent with each other. The proposed change is acceptable.

2. Table 3.3-1 The licensee proposed to revise entries under "ACTION" for three-loop operation from "2" to "7". This change adds consistency to the TS and follows the guidance of the Westinghouse Standard Technical Specifications (NUREG-0452, Revision 4), and is acceptable.

3. Table 3.3-5 On page 3/4 3-27 under Functional Unit 6.b under "RESPONSE TIME IN SECONDS" revise entry from " ≤ 78.0 (1)" to "≤13.0 (2)." On page 3/4 3-28 under "TABLE NOTATION" add a new note 2, "The 13.0 second response time includes 3 seconds for signal processing and 10 seconds for feedwater flow control valve stroke/closing time (see Table 3.6-1 FCV-1-FW-478, 488 and 498)". Table 3.6-1 shows the feedwater flow control valve stroke/closing time as 13 seconds or less; that is the correct limit. Page 3/4 3-27 has erroneously shown the limit to be less than or equal to 78 seconds and is therefore in conflict with Table 3.6-1. The licensee's proposed change would correct the error, eliminate an internal inconsistency, add clarity and is therefore acceptable.

4. Table 3.3-6 The reporting requirements of Action 36 have been changed from a special report submitted within 14 days to inclusion in the next Semi-Annual Effluent Release Report. In addition, the new action statement requires repair of the inoperable channel, and, if the channel cannot be repaired within 30 days, to describe in detail why it was not repaired in a timely manner. This is consistent with the reporting requirements of Action statement b in specification 3.3.3.9 and 3.3.3.10 and does not affect the UFSAR accident analysis of Section 14. The requested change is acceptable. The licensee should consider submitting an amendment request for Unit 2 to make the TS consistent with Unit 1's new TS on this issue.

5. Section 4.3.3.3.2 An additional 1-hour reporting requirement is added regarding seismic events greater than or equal to 0.01 g. This change is consistent with requirements of the current 10 CFR 50.72 and 10 CFR 50.73, and is acceptable.

6. Table 4.3-6 Under Functional Units 3 and 4 under "INSTRUMENT", add a reference to a new footnote 1 which says "Operability required in accordance with Specification 3.3.1.1." Under Functional Unit 11 under "INSTRUMENT", add a reference to a new footnote 3, which says "Operability required in accordance with Specification 3.4.1.3." Under Functional Units 3 and 4 under "CHANNEL CHECK" add a reference to a new footnote 4 which says "Below P-6." Under Functional Unit 11 under "CHANNEL CHECK" add a reference to a new footnote 5 which says "Channel check to be performed in conjunction with Surveillance Requirement 4.4.1.3.1." The changes add clarity and consistency to the TS and are acceptable.

7. Section 3.5.2 Action statement b. is revised to require submittal of a special report within 30 days in accordance with 10 CFR 50.73. A footnote is deleted since its applicability date has passed. This editorial change and the change in accordance with 10 CFR 50.73 are acceptable.

8. Section 3.5.3 Action statement b is revised to require submittal of a special report within 30 days in accordance with 10 CFR 50.73. This change is acceptable.

9. Section 6.7.1 This is changed to state that safety limit violations will be reported to the Commission within one hour, in accordance with the requirements of 10 CFR 50.72. This is acceptable.

10. Section 6.7.1.d This is changed to state that safety limit violation reports will be submitted to the Commission within 30 days, in accordance with the requirements of 10 CFR 50.73. This is acceptable.

11. Sections 6.9.1.14 and 6.9.2 These changes revise the sections to reflect the current NRC organization, and are acceptable.

12. Section 6.10.2 Item l has been deleted since it referenced Section 6.13, which was deleted by Amendment No. 95. Remaining items m and n are renumbered as l and m. These changes are editorial and are acceptable.

13. Table 4.4-2 This table is revised to reflect the NRC notification and reporting requirements issued under Amendment No. 84. This is an editorial change and is acceptable.

14. Section 4.6.1.1.a A footnote is added, consistent with the Standard Technical Specifications, to provide clarification of the containment integrity verification requirements for penetrations inside containment. This is acceptable.

In addition to the above changes, the licensee also proposed to delete surveillance requirement 4.5.1.1.d which requires verification, every 18 months, that the ECCS accumulator isolation valves open on a safety injection signal and a specific reactor coolant pressure signal. In light of Branch Technical Positions ICSB 4 and 8, which include functional requirements associated with the accumulator interlock signals and isolation valves, it is our position that these surveillance requirements should be retained in the Technical Specifications to assure that the functional operability of the interlocks and valves is maintained. Therefore, the staff will not act on this part of the amendment request until the licensee determines an appropriate course of action.

3.0 ENVIRONMENTAL CONSIDERATION

This amendment changes requirements with respect to installation or use of facility components located within the restricted area as defined in 10 CFR Part 20, and involves changes in surveillance and reporting requirements. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and (10). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

4.0 CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: December 7, 1987

Principal Contributors:

L. Crocker, Reviewer
F. Burrows, Reviewer
P. Tam, Project Manager