October 15, 1980

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Docket No. 50-334

Mr. C. N. Dunn, Vice President
Operations Division
Duquesne Light Company
435 Sixth Avenue
Pittsburgh, Pennsylvania 15219

Dear Mr. Dunn:

The Commission has issued the enclosed Amendment No. 33 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 transmitted by letter dated September 30, 1980.

The amendment revises the Radiological Technical Specifications in Appendix A related to the response time required for isolation of the control room ventilation system. We are also taking this opportunity to correct a typographical error in the footnote to Table 3.6.1 of Appendix A to assure correct interpretation of requirements related to isolation of certain containment penetrations.

Copies of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

Original signed by:
S. A. Varga

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

Enclosures:
1. Amendment No. 33 to DPR-66
2. Safety Evaluation
3. Notice of Issuance

cc: w/enclosures
See next page

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

October 15, 1980

Docket No. 50-334

Mr. C. N. Dunn, Vice President
Operations Division
Duquesne Light Company
435 Sixth Avenue
Pittsburgh, Pennsylvania 15219

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The Commission has issued the enclosed Amendment No. 33 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 transmitted by letter dated September 30, 1980.

The amendment revises the Radiological Technical Specifications in Appendix A related to the response time required for isolation of the control room ventilation system. We are also taking this opportunity to correct a typographical error in the footnote to Table 3.6.1 of Appendix A to assure correct interpretation of requirements related to isolation of certain containment penetrations.

Copies of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

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

Enclosures:
1. Amendment No. 33 to DPR-66
2. Safety Evaluation
3. Notice of Issuance

cc: w/enclosures
See next page

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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. 33
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 September 30, 1980, 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 Appendices A and B, as revised through Amendment No. 33 , 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: October 15, 1980

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 33 TO FACILITY OPERATING LICENSE NO. DPR-66

DOCKET NO. 50-334

Revise Appendix A as follows:

Remove Pages	Insert Pages
3/4 3-27	3/4 3-27
3/4 6-19b	3/4 6-19b

TABLE 3.6-1 (Continued)

	VALVE NUMBER INSIDE/OUTSIDE		FUNCTION	TESTABLE DURING PLANT OPERATION	ISOLATION TIME (Sec) INSIDE/OUTSIDE	
27.		TV-CV150A TV-CV150B	Containment Vacuum Pump & H_2 Recomb. Suction	Yes	N/A	7.5
28.	MOV-SI842	TV-SI889	SI Accumulator Test Line	Yes	15	7.5
29.			Containment Leakage Monitoring Open Taps	Yes	N/A	5
30.		TV-LM100A1	Containment Leakage Monitoring Open Taps	Yes	N/A	5
31.		TV-LM100A2	Containment Leakage Monitoring Open Taps	Yes	N/A	5
32.			Containment Leakage Monitoring Open Taps	Yes	N/A	5
B.	Phase "B" Isolation					
1.	TV-CC103A1	TV-CC103A	Component Cooling to R.C. Pumps	No	20	20
2.	TV-CC103B1	TV-CC103B	Component Cooling to R.C. Pumps	No	20	20
3.	TV-CC103C1	TV-CC103C	Component Cooling to R.C. Pumps	No	20	20
4.	TV-CC111A2	TV-CC111A1	Component Cooling to Shroud Coolers	Yes	20	20
5.		TV-SV100A	Main Condenser Ejector Vent	Yes	N/A	20
6.	TV-CC107D1	TV-CC107D2	Component Cooling from R.C. Pumps B&C Thermal Barriers	No	20	20
7.	TV-CC105D1	TV-CC105D2	Component Cooling from R.C. Pumps B&C Motors	No	20	20
8.	TV-CC107E1	TV-CC107E2	Component Cooling from R.C. Pump A Thermal Barrier	No	10	10
9.	TV-CC105E1	TV-CC105E2	Component Cooling from R.C. Pump A Motor	No	14	14
10.	TV-CC110E3	TV-CC110E2	Air Recirc. Cooling Water - In	Yes	30	30
11.		TV-CC110F1	Air Recirc. Cooling Water - Out	Yes	30	30
	TV-CC110D	TV-CC110F2				
12.	TV-CC111D1	TV-CC111D2	Component Cooling Water from Shroud Coolers	Yes	20	20
13.		MOV-QS101B	Quench Spray Pump - Discharge	Yes	N/A	(1)75
14.		MOV-QS101A	Quench Spray Pump - Discharge	Yes	N/A	(1)75
#15.		MOV-RS156B	Outside Recirc. Spray Pump - Discharge	Yes	N/A	(1)75
#16.		MOV-RS156A	Outside Recirc. Spray Pump - Discharge	Yes	N/A	(1)75
#17.		MOV-RS155A	Outside Recirc. Spray Pump - Suction	Yes	N/A	(1)75
#18.		MOV-RS155B	Outside Recirc. Spray Pump - Suction	Yes	N/A	(1)75

(1) Maximum opening time.

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)	≤ 13.0#/23.0##
b. Reactor Trip (from SI)	≤ 3.0
c. Feedwater Isolation	≤ 75.0(1)
d. Containment Isolation-Phase "A"	≤ 22.0#/33.0##
e. Auxiliary Feedwater Pumps	Not Applicable
f. R_X Plant River Water System	≤ 77.0#/110.0##
g. Steam Line Isolation	≤ 8.0
5. Containment Pressure--High-High	
a. Containment Quench Spray	≤ 77.0
b. Containment Isolation-Phase "B"	Not Applicable
c. Control Room Ventilation Isolation	≤22.0#/77.0##
6. Steam Generator Water Level--High-High	
a. Turbine Trip-Reactor Trip	≤ 2.5
b. Feedwater Isolation	≤ 78.0(1)
7. Containment Presssure--Intermediate High-High	
a. Steam Line Isolation	≤ 8.0
8. Steamline Pressure Rate--High Negative	
a. Steamline Isolation	≤ 8.0

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 33 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

Introduction

During normal plant operation at the Beaver Valley Power Station, Unit 1, outside air is drawn into the control room ventilation system. Following a design basis accident, the control room ventilation system is automatically isolated. Bottled air is released and a separate recirculation system acts as the control room's ventilation system.

Technical Specification Table 3.3-5 states that following a containment isolation Phase B signal, the control room ventilation system must be isolated within 17 or 30 seconds, depending on whether offsite power is available or unavailable, respectively.

In a letter dated September 30, 1980 (see reference), the licensee stated that due to a typographical error the stated isolation times were incorrect and that the actual isolation times should be 22 and 77 seconds respectively. The licensee has therefore requested an emergency Technical Specification change so that the plant can be brought back to power without violating the acceptance criteria of the Technical Specifications.

Evaluation

During normal power plant conditions the containment building operates under subatmospheric conditions, the Supplementary Leak Collection and Exhaust System (SLCRS) maintains a slight vacuum (1/8" water gage) in the contiguous area surrounding the containment, and outside air is drawn in to serve the control room ventilation system. This design assures that only inleakage into the containment takes place and that the control room ventilation system uses uncontaminated air.

Following a design basis accident, the Containment Isolation Phase B signal initiates several actions. (The phase B isolation signal is actuated on a containment high-high pressure setpoint of 10.0 psig.) Coincident with the Phase B isolation signal is the release of the bottled air and the actuation of the recirculation fans in the control room. The dampers which release the bottled air to the control room are D.C. solenoid operated pneumatic valves that will move to their accident position regardless of the availability of emergency power.

The bottled air system is comprised of five separate tanks. Each tank is orificed so that a maximum of 100 cfm from each tank enters the control room following a Phase B isolation signal. The control room only requires 400 cfm for normal ventilation purposes. The additional 100 cfm provides both a margin and the positive pressure (additional instruments have been installed for over-pressure protection) in the control room. Since the bottled air tanks are orificed, the increase in time to isolate the control room ventilation system should have a negligible effect on the adequacy of the system's inventory.

The bottled air enters the control room at 500 cfm and creates a positive pressure. The outside air flow from the normal control room ventilation system is temporarily reversed. Bottled air escapes the control room through the normal ventilation system during the time period between actuation of the Phase B isolation signal and isolation of the control room ventilation system. This occurs at either 22 or 77 seconds after the Phase B isolation signal depending on whether offsite power is available or unavailable, respectively. This design assures that only outleakage occurs from the control room during an accident and that contaminated air is prevented from entering.

In addition to the control room ventilation system, the SLCRS also experiences a post-accident change of mode. Subsequent to the Phase A isolation signal, (Phase A is actuated by either a containment high pressure setpoint of 1.5 psig or a safety injection signal), bypass dampers redirect the exhaust through an emergency filter train before the air is released through the plant stack. The emergency filters reduce the potential of radioactive gases reaching the control room ventilation intake system. The emergency filter trains of the SLCRS are actuated and effective at least 15 seconds before the control room ventilation system is isolated - depending on the time interval between the containment pressure rising from the high pressure to the high-high pressure setpoints.

In summary, upon receipt of a Phase A isolation signal (safety injection or containment high pressure of 1.5 psig), the SLCRS redirects the exhaust through a separate emergency high efficiency filter train. At this time the control room ventilation system is still drawing in outside air. Isolation of the control room ventilation system and actuation of the bottled gas system does not occur until a Phase B isolation signal (containment high-high pressure of 10.0 psig) is reached. The licensee has chosen to isolate the control room on the Phase B signal rather than the Phase A signal so that the bottled gas system would not be depleted on spurious safety injection signals.

Increasing the Technical Specification limit on isolating the control room ventilation system following a Phase 3 isolation signal has an insignificant effect because the licensee has shown that during this time interval the only leakage will be outleakage of bottled air from the control room. The licensee's proposed technical specification change has no effect on this aspect. We conclude that there are no unacceptable safety implications associated with the change, the change does not constitute an unreviewed safety question, and, that the change is therefore acceptable.

Environmental Consideration

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) 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.

Date: October 15, 1980

References

Letter from Duquesne Light Company (C. N. Dunn) to U. S. Nuclear Regulatory Commission (Director, NRR) dated September 30, 1980.

7590-01

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-334

DUQUESNE LIGHT COMPANY

OHIO EDISON COMPANY

PENNSYLVANIA POWER COMPANY

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 33 to Facility Operating License No. DPR-66 issued to Duquesne Light Company, Ohio Edison Company, and Pennsylvania Power Company (the licensees), which revised Technical Specifications for operation of the Beaver Valley Power Station, Unit No. 1 (the facility) located in Beaver County, Pennsylvania. The amendment is effective as of the date of issuance.

The amendment revises the Radiological Technical Specifications related to the response time required for isolation of the control room ventilation system and for isolation of certain containment penetrations.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since this amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment dated September 30, 1980, (2) Amendment No. 33 to License No. DPR-66 and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C. and at the B. F. Jones Memorial Library, 663 Franklin Avenue, Aliquippa, Pennsylvania 15001. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 15th day of October 1980

FOR THE NUCLEAR REGULATORY COMMISSION

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