

July 11, 1991

Docket Nos. 50-334  
and 50-412  
Serial No. BV-91-020  
  
Mr. J. D. Sieber, Vice President  
Nuclear Group  
Duquesne Light Company  
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Dear Mr. Sieber:

SUBJECT: BEAVER VALLEY UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS  
(TAC NOS. 79704 AND 79705)

The Commission has issued the enclosed Amendment Nos. 158 and 37 to Facility Operating License Nos. DPR-66 and NPF-73 for the Beaver Valley Power Station, Unit Nos. 1 and 2. The amendments consist of changes to the Technical Specifications in response to your application dated February 20, 1991.

The amendments modify the Appendix A Technical Specifications for determining the containment leakage rate. Specifically, the amendments modify surveillance requirement (TS 4.6.1.2) which prescribes how the containment leakage rate should be determined. The modification removes the reference to ANSI N45.4-1972 and prescribes the leakage rate to be determined in accordance with Appendix J of 10 CFR Part 50. Appendix J of 10 CFR Part 50 includes both ANSI N45.4-1972 and alternate method ANSI/ANS 56.8-1987 as approved procedures for calculating containment leakage rate.

A copy of the related Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

Albert W. De Agazio, Senior Project Manager  
Project Directorate I-4  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

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Enclosures:

- 1. Amendment No. 158 to DPR-66
- 2. Amendment No. 37 to NPF-73
- 3. Safety Evaluation

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cc w/enclosures:  
See next page

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Mr. J. D. Sieber  
Duquesne Light Company  
cc:

Beaver Valley Power Station  
Units 1 & 2

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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. 158  
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 February 20, 1991, 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.

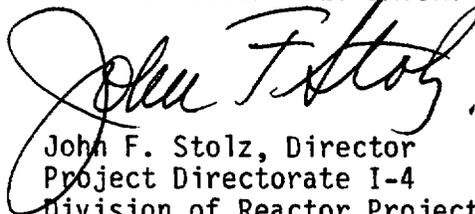
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-66 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 158, 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, 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: July 11, 1991

ATTACHMENT TO LICENSE AMENDMENT NO. 158

FACILITY OPERATING LICENSE NO. DPR-66

DOCKET NO. 50-334

Replace the following page of Appendix A, Technical Specifications, with the enclosed page as indicated. The revised page is identified by amendment number and contain vertical lines indicating the areas of change.

Remove

3/4 6-2

Insert

3/4 6-2

## CONTAINMENT SYSTEMS

### CONTAINMENT LEAKAGE

#### LIMITING CONDITION FOR OPERATION

---

3.6.1.2 Containment leakage rates shall be limited to:

- a. An overall integrated leakage rate of:
  1.  $< L_a$ , 0.10 percent by weight of the containment air per 24 hours at  $P_a$ , (40.0 psig), or
- b. A combined leakage rate of  $\leq 0.60 L_a$  for all penetrations and valves subject to Type B and C tests as identified in Table 3.6-1, when pressurized to  $P_a$ .

APPLICABILITY: MODES 1, 2, 3 and 4.

#### ACTION:

With either (a) the measured overall integrated containment leakage rate exceeding  $0.75 L_a$ , or (b) with the measured combined leakage rate for all penetrations and valves subject to Types B and C tests exceeding  $0.60 L_a$ , restore the leakage rate(s) to within the limit(s) prior to increasing the Reactor Coolant System temperature above 200°F.

#### SURVEILLANCE REQUIREMENTS

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4.6.1.2 The containment leakage rates shall be demonstrated at the following test schedule and shall be determined in accordance with Appendix J of 10 CFR 50\*:

- a. A Type-A test (Overall Integrated Containment Leakage Rate) shall be conducted at 40 ± 10-month intervals during shutdown at  $P_a$  (40.0 psig).

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\* Exemption to Appendix J of 10 CFR 50, Section III.D.1(a), granted on December 5, 1984.



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. 37  
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 February 20, 1991, 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.

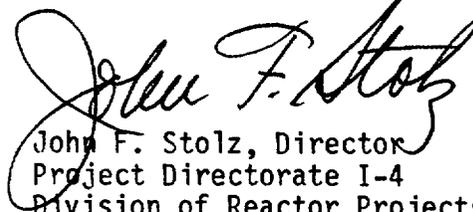
2. Accordingly, the licensee is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C(2) of Facility Operating License No. NPF-73 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 37, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto are hereby incorporated in the license. DLCO 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 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: July 11, 1991

ATTACHMENT TO LICENSE AMENDMENT NO. 37

FACILITY OPERATING LICENSE NO. DPR-73

DOCKET NO. 50-412

Replace the following page of Appendix A, Technical Specifications, with the enclosed page as indicated. The revised page is identified by amendment number and contain vertical lines indicating the areas of change.

Remove

3/4 6-2

Insert

3/4 6-2

### 3/4.6 CONTAINMENT SYSTEMS

#### 3/4.6.1 PRIMARY CONTAINMENT

##### CONTAINMENT INTEGRITY

##### LIMITING CONDITION FOR OPERATION

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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

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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.

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\*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.

## CONTAINMENT SYSTEMS

### CONTAINMENT LEAKAGE

#### LIMITING CONDITION FOR OPERATION

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3.6.1.2 Containment leakage rates shall be limited to:

- a. An overall integrated leakage rate of  $\leq L_a$ , 0.10 percent by weight of the containment air per 24 hours at  $P_a$ , (44.7 psig).
- b. A combined leakage rate of  $< 0.60 L_a$  for all penetrations and valves subject to Type B and C tests as identified in Table 3.6-1, when pressurized to  $P_a$  (44.7 psig).

APPLICABILITY: MODES 1, 2, 3 and 4.

#### ACTION:

With either (a) the measured overall integrated containment leakage rate exceeding  $0.75 L_a$ , or (b) with the measured combined leakage rate for all penetrations and valves subject to Types B and C tests exceeding  $0.60 L_a$ , restore the leakage rate(s) to within the limit(s) prior to increasing the Reactor Coolant System temperature above 200°F.

#### SURVEILLANCE REQUIREMENTS

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4.6.1.2 The containment leakage rates shall be demonstrated at the following test schedule and shall be determined in accordance with Appendix J of 10 CFR 50:

- a. A Type-A test (Overall Integrated Containment Leakage Rate) shall be conducted at  $40 \pm 10$ -month intervals during shutdown at  $P_a$  (44.7 psig).
- b. If any Periodic Type A test fails to meet  $0.75 L_a$ , the test schedule for subsequent Type A tests shall be reviewed and approved by the Commission. If two consecutive Type A tests fail to meet  $0.75 L_a$ , a Type A test shall be performed at least every 18 months until two consecutive Type A tests meet  $0.75 L_a$  at which time the above test schedule may be resumed.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 158 TO FACILITY OPERATING LICENSE NO. DPR-66  
AMENDMENT NO. 37 TO FACILITY OPERATING LICENSE NO. NPF-73  
DUQUESNE LIGHT COMPANY  
OHIO EDISON COMPANY  
PENNSYLVANIA POWER COMPANY  
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY  
THE TOLEDO EDISON COMPANY  
BEAVER VALLEY POWER STATION, UNIT NOS. 1 AND 2  
DOCKET NOS. 50-334 AND 50-412

1.0 INTRODUCTION

By letter dated February 20, 1991, the Duquesne Light Company (DLC) submitted a request for changes to the Beaver Valley Power Station, Unit Nos. 1 and 2 Technical Specifications (TS). The requested change would modify the Appendix A Technical Specifications for determining containment leakage. Specifically, the amendments would modify surveillance requirement (TS 4.6.1.2) to delete the reference to ANSI N45.4-1972.

2.0 BACKGROUND

The Appendix A Technical Specification 4.6.1.2 requires that the containment leakage rate be determined by criteria specified in Appendix J of 10 CFR Part 50 using the methods and provisions of ANSI N45.4-1972. On November 15, 1988, the Commission published in the Federal Register (53 FR 45891) a final rule which provided for an alternative method for containment leakage rate testing. This rule explicitly permits the use of the Mass Point statistical data analysis method for calculating containment leakage rates (found in ANSI/ANS 56.8-1987 "Containment System Leakage Testing Requirements"). The present wording of Surveillance Requirement 4.6.1.2 only refers to ANSI N45.4-1972 and does not allow the use of the improved alternate method, Mass Point analysis, in calculating containment leakage rates. By deleting the specific reference to ANSI N45.4-1972 from the Surveillance Requirement 4.6.1.2, and directing that containment leakage rates be determined in accordance with Appendix J of 10 CFR Part 50, either procedure can be implemented.

### 3.0 EVALUATION

The deletion of the reference to ANSI N45.4-1972 from Surveillance Requirement 4.6.1.2 will not affect the ability of the Integrated Leak Rate Test to determine the actual containment leakage rate. The leakage rate will be determined in accordance with 10 CFR Part 50 Appendix J which references ANSI N45.4-1972 and the new alternate method ANSI/ANS 56.8-1987 as approved methods. This allows DLC to follow the Total Time and Point to Point analysis methods recognized by ANSI N45.4-1972 or the new improved Mass Point analysis method. This Mass Point method was incorporated in a newer ANSI standard, ANSI/ANS 56.8 - 1981 (revision 1987), "Containment System Leakage Testing Requirement" and has been accepted by the NRC staff as an improved alternate method of calculating containment leakage rates. The utilization of the Mass Point analysis provides at least the same degree of accuracy as the Total Time and Point to Point methods. Therefore the determination that the actual leakage rates from containment are less than or equal to that assumed in the limiting containment DBA analysis will continue to be performed. The modified surveillance requirement will continue to ensure that the leak tightness of the containment is maintained to prevent the uncontrolled release of radioactivity to the environment. Based on the above, the staff concludes that the proposed change to the Technical Specifications is acceptable.

### 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Pennsylvania State official was notified of the proposed issuance of the amendments. The State official had no comments.

### 5.0 ENVIRONMENTAL CONSIDERATION

The amendments involve a change to a surveillance requirement. The NRC staff has determined that the amendments involve 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 the amendments involve no significant hazards consideration, and there has been no public comment on such finding (56 FR 20035). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

### 6.0 CONCLUSION

The Commission has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: James W. Andersen

Date: July 11, 1991