

# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

## COMMONWEALTH EDISON COMPANY

### DOCKET NO. STN 50-456

# BRAIDWOOD STATION, UNIT NO. 1

# AMENDMENT O FACILITY OPERATING LICENSE

Amendment No. 97 License No. NPF-72

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Commonwealth Edison Company (the licensee) dated August 23, 1996, 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 healtn 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-72 is hereby amended to read as follows:

9810220

### (2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A as revised through Amendment No. 97 and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this 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 and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Stewart N. Bailey, Project Manager Project Directorate III-2 Division of Reactor Projects - III/IV Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: October 15, 1998



#### UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

## COMMONWEALTH EDISON COMPANY

### DOCKET NO. STN 50-457

# BRAIDWOOD STATION, UNIT NO. 2

### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 97 License No. NPF-77

- The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Commonwealth Edison Company (the licensee) dated August 23, 1996, 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-77 is hereby amended to read as follows:

### (2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A as revised through Amendment No. 97 and the Environmental Protection Plan contained in Appendix B, both of which were attached to License No. NPF-72, dated July 2, 1987, are hereby incorporated into this 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 if its issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Stewart N. Bailey, Project Manager Project Directorate III-2 Division of Reactor Projects - III/IV Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: October 15, 1998

# ATTACHMENT TO LICENSE AMENDMENT NOS. 97 AND 97

2 1

.

# FACILITY OPERATING LICENSE NOS. NPF-72 AND NPF-77

# DOCKET NOS. STN 50-456 AND STN 50-457

Replace the following pages of the Appendix "A" Technical Specifications with the attached pages. The revised pages are identified by amendment number and contain vertical lines indicating the area of change. Pages indicated by an asterisk are provided for convenience only.

Remove Pages	Insert Pages
3/4 7-17	3/4 7-17
*3/4 7-18	*3/4 7-18
B 3/4 7-4	B 3/4 7-4

### PLANT SYSTEMS

# 3/4.7.7 NON-ACCESSIBLE AREA EXHAUST FILTER PLENUM VENTILATION SYSTEM

### LIMITING CONDITION FOR OPERATION

3.7.7\* Three independent non-accessible area exhaust filter plenums (50% capacity each) shall be OPERABLE with two plenums aligned for operation and one plenum in standby.

APPLICABILITY: MODES 1, 2, 3, and 4.

### ACTION:

With one non-accessible area exhaust filter plenum inoperable, restore the inoperable plenum to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. During testing of any inoperable plenum, it is acceptable to place one of the two OPERABLE plenums in standby.

### SURVEILLANCE REQUIREMENTS

4.7.7 Each non-accessible area exhaust filter plenum shall be demonstrated OPERABLE:

- At least once per 31 days on a STAGGERED TEST BASIS by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that operation occurs for at least 15 minutes;
- b. At least once per 18 months, or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire, or chemical release in any ventilation zone communicating with the exhaust filter plenum by:
  - Verifying that the exhaust filter plenum satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 1% when using the test procedure guidance in Regulatory Positions C.5.a, C.5.c and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the flow rate is 66,900 cfm ±10% for the train and 22,300 cfm ±10% per bank;
  - 2) Verifying, within 31 days after removal, that a laboratory analysis of a representative carbon sample from each bank of adsorbers of the train obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978, for methyl iodide penetration of less than 1% when tested at the temperature of 30°C and a relative humidity of 70%;

<sup>\*</sup>Not applicable prior to December 1, 1987.

#### PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- 3) Verifying a system flow rate of 66,900 cfm ± 10% through the train and 22,300 cfm ±10% per bank through the exhaust filter plenum during operation when tested in accordance with ANSI N510-1980; and
- 4) Verifying that with the system operating at a flow rate of 66,900 cfm ±10% through the train and 22,300 cfm ±10% per bank and exhausting through the HEPA filte. and charcoai adsorbers, the total bypass flow of the system and the damper leakage is less than or equal to 1% when the system is tested by admitting cold DOP at the system intake and the damper leakage rate is determined by either direct measurements or pressure decay measurements at a test pressure of 2 inches of water and the auxiliary building exhaust fans are operating at their rated flow.
- c. After every 720 hours of charcoal adsorber operation, by verifying, within 31 days after removal, that a laboratory analysis of a representative carbon sample obtained from each bank of adsorbers of the train in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory function 2, March 1978, when the average for a methyl iodide penetration of less than 1% when tested at a temperature of 30°C and a relative humidity of 70%.
- d. At least once per 18 months by:
  - Verifying for each filter bank of the train that the pressure drop across the combined HEPA filters and charcoal adsorber banks of less than 6.0 inches Water Gauge while operating the exhaust filter plenum at a flow rate of 66,900 cfm + 10% through the train and 22,300 cfm ±10% per bank;
  - Verifying that the exhaust filter plenum starts on manual initiation or Safety Injection test signal; and
  - 3) Verifying that the system maintains the ECCS equipment rooms at a negative pressure of greater than or equal to 1/4 in. Water Gauge relative to the outside atmosphere during system operation while operating at a flow rate of 66,900 cfm ±10% through the train and 22,300 cfm ±10% per bank.
- e. After each complete or partial replacement of a HEPA filter bank, by verifying that the exhaust filter plenum satisfies the in-place penetration testing acceptance criteria of less than 1% in accordance with ANSI N510-1980 for a DOP test aerosol while operating at a flow rate of 66,900 cfm ± 10% through the train and 22,300 cfm ±10% per bank; and

#### PLANT SYSTEMS

#### BASES

# 3/4.7.6 CONTROL ROOM VENTILATION SYSTEM

The CPERABILITY of the Control Room Ventilation System ensures that: (1) the ambient air temperature does not exceed the allowable temperature for continuous duty rating for the equipment and instrumentation cooled by this system, and (2) the control room will remain habitable for operations personnel during and following all credible accident conditions. Operation of the system with the heaters operating for at least 10 continuous hours in a 31-day period is sufficient to reduce the buildup of moisture on the adsorbers and HEPA filters. The OPERABILITY of this system in conjunction with control room design provisions is based on limiting the radiation exposure to personnel occupying the control room to 5 rem or less whole body, or its equivalent. This limitation is consistent with the requirements of General Design Criterion 19 of Appendix A, 10 CFR Part 50. ANSI N510-1980 will be used as a procedural guide for surveillance testing.

The surveillance requirement to verify that each control room ventilation system has the capability to remove the required heat load, as determined by the original heat capacity verification test, consists of a combination of testing and calculations. The 18-month frequency is appropriate since significant degradation of the control room ventilation system is slow and not expected over this time period.

## 3/4.7.7 NON-ACCESSIBLE AREA EXHAUST FILTER PLENUM VENTILATION SYSTEM

The OPERABILITY of the Non-Accessible Area Exhaust Filter Plenum Ventilation System ensures that radioactive materials leaking from the ECCS equipment within the pump rooms following a LOCA are filtered prior to reaching the environment. The operation of this system and the resultant effect on offsite dosage calculations was assumed in the safety analyses. ANSI N510-1980 will be used as a procedural guide for surveillance testing.

The Non-Accessible Area Exhaust Filter Plenum Ventilation System is designed such that two plenums are on line and one plenum is in standby. A plenum is in standby if its inlet damper is operable but closed, and all remaining components are operable. This alignment ensures proper air flow and prevents fan stall and possible fan damage. The action statement provisions for standby plenums are necessary to accommodate required post maintenance and surveillance testing activities. These provisions allow an operable plenum to be placed in standby while performing testing on an inoperable plenum. The standby plenum will still be capable of being realigned and filtering ECCS cubicle air in the event of a LOCA.

#### 3/4.7.8 SNUBBERS

All snubbers are required OPERABLE to ensure that the structural integrity of the Reactor Coolant System and all other safety-related systems is maintained during and following a seismic or other event initiating dynamic loads.

Snubbers are classified and grouped by design and manufacturer but not by size. For example, mechanical snubbers utilizing the same design features of the 2-kip, 10-kip, and 100-kip capacity manufactured by Company "A" are of the same type. The same design mechanical snubbers manufactured by Company "B" for the purposes of this specification would be of a different type, as would hydraulic snubbers from either manufacturer.

A list of individual snubbers with detailed information of snubber location and size and of systems affected shall be available at the plant in accordance with Section 50.71(c) of 10 CFR Part 50. The accessibility of each snubber shall be determined and approved by the Onsite Review and Investigative Function. The determination shall be based upon the existing radiation levels and the expected time to perform a visual inspection in each snubber location