October 15, 1998

Mr. Oliver D. Kingsley, President
Nuclear Generation Group
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 500
Downers Grove, IL 60515

SUBJECT: ISSUANCE OF AMENDMENTS (TAC NOS. M96449, M96450, M96451 AND M96452)

Dear Mr. Kingsley:

The U.S. Nuclear Regulatory Commission (Commission) has issued the enclosed Amendment No. 105 to Facility Operating License No. NPF-37 and Amendment No. 105 to Facility Operating License No. NPF-66 for the Byron Station, Unit Nos. 1 and 2, respectively, and Amendment No. 97 to Facility Operating License No. NPF-72 and Amendment No. 97 to Facility Operating License No. NPF-77 for the Braidwood Station, Unit Nos. 1 and 2, respectively. The amendments are in response to your application dated August 23, 1996.

The amendments revise the Technical Specifications related to the Non-Accessible Area Exhaust Filter Plenum Ventilation System to reflect the design lineup and to make provisions for the performance of maintenance and testing.

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

Sincerely,

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

Docket Nos. STN 50-454, STN 50-455,
STN 50-456 and STN 50-457

Enclosures: 1. Amendment No. 105 to NPF-37
2. Amendment No. 105 to NPF-66
3. Amendment No. 97 to NPF-72
4. Amendment No. 97 to NPF-77
5. Safety Evaluation

cc w/encl: see next page

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

October 15, 1998

Mr. Oliver D. Kingsley, President
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The amendments revise the Technical Specifications related to the Non-Accessible Area Exhaust Filter Plenum Ventilation System to reflect the design lineup and to make provisions for the performance of maintenance and testing.

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Sincerely,

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

Docket Nos. STN 50-454, STN 50-455,
STN 50-456 and STN 50-457

Enclosures: 1. Amendment No. 105 to NPF-37
2. Amendment No. 105 to NPF-66
3. Amendment No. 97 to NPF-72
4. Amendment No. 97 to NPF-77
5. Safety Evaluation

cc w/encl: see next page

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Downers Grove, IL 60515

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

COMMONWEALTH EDISON COMPANY

DOCKET NO. STN 50-454

BYRON STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 105
License No. NPF-37

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 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.

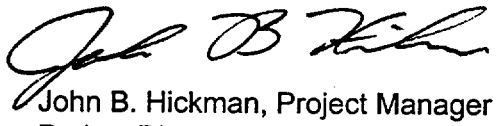
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-37 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. 105 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



John B. Hickman, 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 50-455

BYRON STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 105
License No. NPF-66

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 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-66 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A (NUREG-1113), as revised through Amendment No. 105 and revised by Attachment 2 to NPF-66, and the Environmental Protection Plan contained in Appendix B, both of which were attached to License No. NPF-37, dated February 14, 1985, are hereby incorporated into this license. Attachment 2 contains a revision to Appendix A which is 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

John B. Hickman, 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. 105 AND 105

FACILITY OPERATING LICENSE NOS. NPF-37 AND NPF-66

DOCKET NOS. STN 50-454 AND STN 50-455

Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the attached pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change.

Remove Pages	Insert Pages
3/4 7-19	3/4 7-19
B 3/4 7-5	B 3/4 7-5

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:

a. 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:

1) 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 between 55,669 cfm and 68,200 cfm for the train;

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%;

CONTROL ROOM VENTILATION SYSTEM (Continued)

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 as well as other factors associated with accessibility during plant operations (e.g., temperature, atmosphere, location, etc.), and the recommendations of Regulatory Guides 8.8 and 8.10. The addition or deletion of any hydraulic or mechanical snubber shall be made in accordance with Section 50.59 of 10 CFR Part 50.

The visual inspection frequency is based upon maintaining a constant level of snubber protection during an earthquake or severe transient. Therefore, the required inspection interval varies inversely with the observed

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

COMMONWEALTH EDISON COMPANY

DOCKET NO. STN 50-456

BRAIDWOOD STATION, UNIT NO. 1

AMENDMENT TO 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 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-72 is hereby amended to read as follows:

(2) Technical Specifications

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

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 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) Technical Specifications

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

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:

a. 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:

1) 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%;

*Not applicable prior to December 1, 1987.

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 filter and charcoal 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, 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:

1) 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;

2) 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

3/4.7.6 CONTROL ROOM VENTILATION SYSTEM

The OPERABILITY 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

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 105 TO FACILITY OPERATING LICENSE NO. NPF-37,

AMENDMENT NO. 105 TO FACILITY OPERATING LICENSE NO. NPF-66,

AMENDMENT NO. 97 TO FACILITY OPERATING LICENSE NO. NPF-72,

AND AMENDMENT NO. 97 TO FACILITY OPERATING LICENSE NO. NPF-77

COMMONWEALTH EDISON COMPANY

BYRON STATION, UNIT NOS. 1 AND 2

BRAIDWOOD STATION, UNIT NOS. 1 AND 2

DOCKET NOS. STN 50-454, STN 50-455, STN 50-456 AND STN 50-457

1.0 INTRODUCTION

By letter dated August 23, 1996, the Commonwealth Edison Company (ComEd, the licensee) proposed changes to the Technical Specifications (TSs) for Byron Station, Units 1 and 2, and Braidwood Station, Units 1 and 2. The proposed changes to TS 3/4.7.7, "Non-Accessible Area Exhaust Filter Plenum Ventilation System," provide clarification of acceptable system alignments which satisfy the design bases and provide action requirements to accommodate maintenance and surveillance activities.

Currently, TS 3/4.7.7 does not reflect the acceptable system design alignments for the Non-Accessible Area Exhaust Filter Plenum Ventilation System (VAS). The current TS requires three plenums to be operable. The VAS is designed to operate with two of three operable charcoal filter plenums aligned for service, and the third operable plenum in standby. In addition, during maintenance or testing of an inoperable plenum, it is necessary to place one of the other operable plenums in standby. The standby plenum can be realigned for service to filter any radioactive materials from the air of emergency core cooling system (ECCS) equipment rooms in the event of a postulated loss-of-coolant accident (LOCA).

2.0 BACKGROUND

Operability of the VAS ensures that any airborne radioactive material leaking from ECCS (following a LOCA) is filtered prior to being released to the environment through the plant stack. The VAS consists of three parallel filter plenums (50 percent capacity each). Each plenum consists of an inlet damper, three parallel charcoal filter banks (consisting of a pre-filter, an upstream high efficiency particulate air (HEPA) filter, a charcoal adsorber and a downstream HEPA filter), two parallel booster fans (six fans total) and discharge dampers on the outlet of

each booster fan. The normal exhaust for the VAS is connected via a charcoal adsorber bypass line between the upstream HEPA filter and the charcoal adsorber. The plenums are connected to ECCS equipment rooms for both units. During normal operation, the charcoal booster fans are not running.

Following a LOCA, the charcoal adsorber bypass dampers close automatically and the charcoal booster fans are started. The booster fans will start automatically on a safety injection (SI) signal when the inlet damper is open. When the plenum is in standby, the booster fans will be started manually as required by emergency procedures. During a loss-of-offsite-power (LOOP), at least one VAS plenum will always be in service initially.

Two plenums are required to achieve minimum design-basis air flow for non-accessible equipment areas. The flow is based on maintaining radiation doses that are as low as reasonably achievable (ALARA) and on maintaining acceptable temperatures in the non-accessible areas. Therefore, the design function of the VAS is to ensure that the ECCS cubicles are maintained at a negative pressure and any airborne post-LOCA leakage is filtered prior to release.

3.0 EVALUATION

The licensee proposed revisions to TS 3/4.7.7 to change (1) the Limiting Condition for Operation (LCO) to state, "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," and (2) the action statement to add the statement, "During testing of any inoperable plenum, it is acceptable to place one of the two OPERABLE plenums in standby." Accordingly, a paragraph is added to the bases to support the TS revisions.

Under certain surveillance or corrective maintenance conditions, it is sometimes necessary to have less than two operable plenums aligned for normal operation. For example, corrective maintenance may require an air flow test on a plenum prior to declaring it operable. This plenum must be aligned to accomplish the test. However, the VAS is not designed to have all three plenums in operation simultaneously. To prevent this, it is necessary to place one of the other operable plenums in standby. A plenum is in standby when its inlet damper is operable, but closed and all remaining components are operable. This alignment (one plenum in test and onr plenum in standby) prevents stalling of charcoal booster fans and possible fan damage. Since the resulting alignment does not meet the requirements of the revised LCO, it is appropriate to limit the time that this condition can exist. The proposed action statement in TS 3/4.7.7 accommodates this condition, while at the same time limiting its duration.

Following an accident, the VAS is required to provide ECCS equipment room filtration after the suction of the ECCS pumps is switched from the refueling water storage tank to the containment recirculation sump. The switch can to occur in approximately 11 minutes following a LOCA. On receipt of the SI signal during a LOCA, the plenums aligned for operation will realign immediately or, with LOOP, following the re-energization of its engineered safety

feature (ESF) bus, which will occur within 10 seconds. Thus, there will always be at least one plenum (assuming a single failure) in operation automatically following a LOCA.

Plant emergency procedures provide direction for realigning the standby plenum before the ECCS pump suction swap-over. Observations of licensed operators undergoing simulator requalification training have verified that the VAS is realigned well before the ECCS swap-over to the containment recirculation sump. Since the standby plenum will be realigned before filtration of the ECCS equipment room air is required, the Updated Final Safety Analysis Report (UFSAR) assumptions and offsite dose calculation assumptions remain valid. Therefore, the proposed changes will not result in an increase in the consequences of the accident previously evaluated.

Therefore, based on the information provided by the licensee, the staff concludes that the proposed changes to TS 3/4.7.7 are acceptable.

4.0 STATE CONSULTATION

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

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. 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 (62 FR 11488). 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.

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