



**ATTACHMENT B**

**PROPOSED CHANGES TO APPENDIX A,  
TECHNICAL SPECIFICATIONS**

**BYRON AFFECTED PAGES**

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- f. After each complete or partial replacement of a HEPA filter bank, by verifying that the cleanup system satisfies the in-place penetration testing acceptance criteria of less than 0.05% in accordance with ANSI N510-1980 for a DOP test aerosol while operating the Emergency Makeup System at a flow rate of 6000 cfm  $\pm$  10%; and
- g. After each complete or partial replacement of a charcoal adsorber bank in the Emergency Makeup System by verifying that the cleanup system satisfies the in-place penetration testing acceptance criteria of less than 0.05% in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating the system at a flow rate of 6000 cfm  $\pm$  10%.
- h. At least once per 18 months or (1) after any structural maintenance on the charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the recirculation charcoal adsorber by:
  - (1) Verifying that the recirculation charcoal adsorber satisfies the in-place penetration testing acceptance criteria of less than 2% total bypass and uses the test procedure guidance in Regulatory Positions C.5.a, and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the system flow rate is 49,500 cfm  $\pm$  10% for the recirculation charcoal adsorber;
  - (2) Verifying, within 31 days after removal, that a laboratory analysis of a representative carbon sample from the recirculation charcoal adsorber 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 a methyl iodide penetration of less than 1% when tested at a temperature of 30°C and a relative humidity of 70%; and
  - (3) Verifying a system flow rate of 49,500 cfm  $\pm$  10% for the Recirculation Charcoal Adsorber when tested in accordance with ANSI N510-1980
- i. After each complete or partial replacement of a charcoal adsorber bank in the Recirculation Charcoal Adsorber System by verifying that the cleanup system satisfies the in-place penetration testing acceptance criteria of less than 0.1% in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating at a system flowrate of 49,500 cfm  $\pm$  10%.
- j. After every 720 hours of Recirculation Charcoal Adsorber operation by verifying within 31 days after removal, that a laboratory analysis of a representative carbon sample 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 Guide 1.52, Revision 2, March 1978 for a methyl iodide penetration of less than 1% when tested at a temperature of 30°C and a relative humidity of 70%.

k. At least once per 18 months or (1) after any structural maintenance on the charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the recirculation charcoal adsorber by:

## PLANT SYSTEMS

### BASES

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#### 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.

Insert 2 →

#### 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.

#### 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 snubber failures on a given type and is determined by the number of inoperable snubbers found during an inspection of each type. In order to establish the inspection frequency for each type of snubber on a safety-related system, it was assumed

## Insert 2

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.

**ATTACHMENT B**

**PROPOSED CHANGES TO APPENDIX A,  
TECHNICAL SPECIFICATIONS**

**BRAIDWOOD AFFECTED PAGES**

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

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a representative carbon sample 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 Guide 1.52, Revision 2, March 1978 for a methyl iodide penetration of less than 1% when tested at a temperature of 30°C and a relative humidity of 70%.

At least once per 12 months, by verification that each Control Room Ventilation System has been maintained to the standards set out in the attached.

## PLANT SYSTEMS

### BASES

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#### 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.

*Insert 2* →

#### 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.

#### 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.

## Insert 2

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.

## ATTACHMENT C

### EVALUATION OF SIGNIFICANT HAZARDS CONSIDERATION

Commonwealth Edison Company (ComEd) is requesting to amend Byron and Braidwood Station Technical Specification 3/4.7.6, "Control Room Ventilation System." This proposed revision: 1) increases the allowed outage time for an inoperable Control Room chiller in Modes 1 through 4 from 7 to 30 days, 2) adds an alternative action statement for Modes 5 and 6 to allow cessation of core alterations, positive reactivity additions, and movement of irradiated fuel in lieu of placing the operable train of VC in makeup mode, and 3) adds a surveillance requirement to Section 3/4 7.6 to provide further assurance that the Control Room Ventilation System is operable by verifying at least once per 18 months that each Control Room Ventilation System has the capability to remove the required heat load. These proposed changes are in accordance with the referenced NUREG 1431, "Standard Technical Specification for Westinghouse Plants." ComEd has evaluated this amendment request and determined that it involves no significant hazards consideration.

According to 10CFR50.92(c), a proposed amendment to an operating license involves no significant hazards if operation of the facility in accordance with the proposed amendment would not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated; or
2. Create the possibility of a new or different kind of accident from any accident previously evaluated; or
3. Involve a significant reduction in a margin of safety.

**A. The proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.**

The first proposed change will increase the allowed outage time (AOT) for a VC chiller from seven days to thirty days in Modes 1 through 4. The thirty day AOT is based on the low probability of an event requiring control room isolation concurrent with failure of the redundant train of VC. Therefore, one train of VC will always be available to remove normal and accident heat loads and provide control room isolation. Consequently, this change will not result in an increase to offsite dose rates or the exposure of control room operators.

Increasing the AOT will allow for more extensive maintenance and should increase overall availability of the VC chillers. This provides additional assurance that a chiller will be operable on at least one train of VC. In the unlikely event that both VC chillers became inoperable, alternate non-safety related means to maintain control room temperature are available. Based on the above, the proposed increase to the AOT will not increase the probability or consequences of any previously analyzed accident.

The proposed change to the Action a for Modes 5 and 6 adds an alternative to placing the remaining operable VC train in the makeup mode. The alternative would allow the option to suspend CORE ALTERATIONS, positive reactivity changes, and movement of irradiated fuel. In Modes 5 and 6, this greatly reduces the probability of an event that would require control room isolation. The change will have no impact on the consequences of an accident since the remaining train of VC would be capable of isolating the control room on a high radiation signal and providing the necessary temperature control. Based on this review, the proposed Action will not result in an increase in the probability or consequences of a previously analyzed accident.

As noted above, the proposed amendment adds a restriction to suspend movement of irradiated fuel. This change reduces the probability of the occurrence of a fuel handling accident and has no impact of the consequences of any accident. In addition, the wording in Action b was revised to be consistent with the wording in Action a. This change is purely editorial and, therefore, has no impact on the probability or consequences of an accident.

The proposed changes to Section 3/4.7.6 are requested to ensure that surveillances are performed to verify that the Control Room Ventilation System remains capable of performing its design function. Operability of the Control Room Chillers ensures that the ambient air temperature does not exceed the allowable temperature for continuous duty rating for the equipment and instrumentation cooled by the Control Room Ventilation System. The ability of the Control Room Ventilation System to limit the radiation exposure to personnel occupying the control room to 5 rem or less whole body, or its equivalent, is not affected by the addition of this surveillance requirement. The proposed changes do not affect any accident initiators or precursors and do not change or alter the design assumptions for the systems or components used to mitigate the consequences of an accident. Consequently, the changes do not impact any accident previously evaluated in the UFSAR.

Therefore, the proposed changes do not involve an increase in the probability or consequences of an accident previously evaluated.

**B. The proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.**

The first proposed change will increase the AOT for a VC chiller from seven days to thirty days in Modes 1 through 4. During the time one chiller is inoperable, the redundant train is capable of handling the heat loads during normal operation and during all accident scenarios. No new operating conditions are created by this change. Therefore, this change will not result in any new or different accident from those previously analyzed.

The proposed change to the Action for Modes 5 and 6 adds an alternative to allow the option to suspend CORE ALTERATIONS, positive reactivity changes, and movement of irradiated fuel. In Modes 5 and 6, this greatly reduces the probability of an event that would require control room isolation. Also, the remaining train of VC would still be capable of temperature control and isolating the control room on a high radiation signal. This change will not create any new plant operating conditions. Based on this review, the proposed Action will not result in a new or different kind of accident.

The additional restriction on the movement of irradiated fuel in Modes 5 and 6 will not create any new condition which has not been previously analyzed. In addition, for consistency with the wording in Action a, the word "changes" was replaced by the word "additions." This change is purely editorial and, therefore, has no potential to create a new kind of accident.

The proposed changes to add a surveillance requirement to Section 3/4.7.6 do not affect the design or operation of any system, structure, or component in the plant. There are no changes to parameters governing plant operation; no new or different type of equipment will be installed. The proposed changes ensure that equipment remains capable of performing its design function.

Therefore, the proposed changes do not create the possibility of a new or different type of accident from any previously evaluated.

**C. The proposed changes do not involve a significant reduction in a margin of safety.**

The basis for the VC Technical Specification is to ensure that the temperature in the control room does not exceed maximum allowable for the equipment and instrumentation inside. The VC system is also required to limit radiation exposure to control room personnel following an accident. Either of the two redundant trains can perform both of these functions. As long as one train of VC is available, the margin of safety assumed in the bases for this specification is maintained.

Increasing the AOT for one VC chiller unit has no impact on the redundant train of VC. Although one train of VC may be inoperable for a longer period of time, the redundant train can perform all normal and accident functions. The length of the AOT is sufficiently short to assure that a scenario involving an accident requiring control room isolation concurrent with the failure of the redundant train is not credible. Therefore, one train of VC will remain available and no reduction is made to the margin of safety.

The second change involves adding an alternative Action in Modes 5 and 6 that would restrict CORE ALTERATIONS, positive reactivity additions, and movement of irradiated fuel. The existing Action requires that the operable train of VC be placed in the makeup mode of operation. This Action ensures that any failures are readily detected. The alternate Action reduces the potential of an event that would require control room isolation while maintaining one train of VC operable. In both cases, the Actions assure that one train of VC is available for normal and emergency use. Therefore, the proposed change maintains the margin of safety.

Another proposed change involves the condition with no VC trains operable in Modes 5 and 6. Since VC is not available, alternative means must be used to maintain control room temperature. Since the primary alternative involves utilization of outside air, the most appropriate action is to reduce the probability of an event that would require control room isolation. The proposed additional restriction on the movement of irradiated fuel provides added assurance that such an event will not occur. Therefore, the margin of safety is maintained. Also, for consistency with the wording in Action a, the word "changes" was replaced by the word "additions." This change is purely editorial and, therefore, has no impact on the margin of safety.

The final proposed change to add a surveillance requirement does not affect the margin of safety for any Technical Specification. The initial conditions and methodologies used in the accident analyses remain unchanged, therefore, accident analysis results are not impacted. The addition of a Technical Specification surveillance provides further assurance that the Control Room Ventilation System is operable and capable of maintaining the ambient air temperature below the allowable temperature for the continuous duty rating of the equipment and instrumentation cooled by this system. These changes also provide consistency with Standard Technical Specifications.

Therefore, the proposed change does not involve a reduction in the margin of safety.

Based on the above evaluation, Commonwealth Edison has concluded that the subject changes do not involve significant hazards considerations.