

ATTACHMENT B

PROPOSED CHANGES TO APPENDIX A,  
TECHNICAL SPECIFICATIONS, OF FACILITY  
OPERATING LICENSES NPF-37 AND NPF-66

Revision to: 3/4.7-12  
3/4.7-12a  
3/4.7-12b  
B3/4 7-3

## PLANT SYSTEMS

### 3/4.7.4 ESSENTIAL SERVICE WATER SYSTEM

#### LIMITING CONDITION FOR OPERATION

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3.7.4 At least two independent Essential Service Water Systems, ~~each of which includes a loop and a cooling tower~~, shall be OPERABLE.

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

#### ACTION:

- a. With only one Essential Service Water System OPERABLE, restore at least two Essential Service Water Systems to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

#### SURVEILLANCE REQUIREMENTS

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4.7.4 At least two Essential Service Water Systems shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying that each valve (manual, power-operated, or automatic) servicing safety-related equipment that is not locked, sealed, or otherwise secured in position is in its correct position.
- b. At least once per 18 months during shutdown, by verifying that:
  - 1) Each automatic valve servicing safety-related equipment or isolating the non-nuclear safety-related portion of the system actuates to its correct position on a Safety Injection test signal, and
  - 2) Each Essential Service Water System pump starts automatically on a Safety Injection test signal.
- c. ~~At least once per 31 days, by verifying that each cooling tower fan required to be OPERABLE by Specification 3.7.5 operates for at least 15 minutes and at least once per 18 months by visually inspecting and verifying no abnormal breakage or degradation of the fill materials in the cooling tower.~~

## PLANT SYSTEMS

### 3/4.7.4 ESSENTIAL SERVICE WATER SYSTEM

#### LIMITING CONDITION FOR OPERATION

3.7.4.1 A Unit 2 (Unit 1) Essential Service Water pump shall be available to support Unit 1 (Unit 2) operation.

, and

APPLICABILITY: Unit 2 (Unit 1) in MODES 5 and 6 with no fuel in the reactor vessel.  
Switch order Unit 1 (Unit 2) in MODES 1, 2, 3, and 4, with

#### ACTION:

If neither Unit 2 (Unit 1) Essential Service Water pump is available, restore one pump to available status within 7 days or place Unit 1 (Unit 2) in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

#### SURVEILLANCE REQUIREMENTS

4.7.4.1 A Unit 2 (Unit 1) Essential Service Water pump shall be demonstrated available by manually starting and crosstieing to the Unit 1 (Unit 2) system to support Unit 1 (Unit 2) operation:

a. At least once per day by verifying that:

24 hours

~~1) Bus 241 (141) is energized if the 2A (1A) Essential Service Water pump is the available pump or Bus 242 (142) is energized if the 2B (1B) Essential Service Water pump is the available pump, and~~

~~2) The following valves are open or capable of being operated from the Control Room:~~

~~a) SX001A, SX005, SX016A, SX027A, SX033, SX034 and SX143A if the A pump is the available pump, or~~

~~b) SX001B, SX005, SX016B, SX027B, and SX143B if the B pump is the available pump.~~

b. At least once per 31 days, by running the available pump for 15 minutes.

1) The available Essential Service Water pump is capable of being manually started from the Main Control Room, and

2) An Essential Service Water flowpath is established, or capable of being established from the Main Control Room, from Unit 2 (Unit 1) to Unit 1 (Unit 2).

## PLANT SYSTEMS

### 3/4.7.4 ESSENTIAL SERVICE WATER SYSTEM

#### LIMITING CONDITION FOR OPERATION

3.7.4.2 The Essential Service Water System Unit Crosstie shall be either open or capable of being opened from the Main Control Board ~~as a flow path~~ between Unit 1 and 2.

APPLICABILITY: Unit Modes 1, 2, 3, and 4.

ACTION:

- Room to provide an Essential Service Water
- Any Unit in MODES
- a. With one or both of the crosstie valve(s) closed and not capable of being opened from the Control Room, within 7 days restore the valve(s) to available status or open the affected valve(s), and maintain the affected valve(s) open; otherwise be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. The provisions of Specification 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.7.4.2 The Essential Service Water System Unit Crosstie shall be demonstrated available:

- a. At least once per 92 days by cycling <sup>each</sup> crosstie valve 1SX005 and 2SX005, or <sup>ing the</sup> verify valve is locked open with power removed.
- b. The provisions of Specification 4.0.4 are not applicable.

## PLANT SYSTEMS

### BASES

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#### 3/4.7.1.5 MAIN STEAM LINE ISOLATION VALVES

The OPERABILITY of the main steam line isolation valves ensures that no more than one steam generator will blowdown in the event of a steam line rupture. This restriction is required to: (1) minimize the positive reactivity effects of the Reactor Coolant System cooldown associated with the blowdown, and (2) limit the pressure rise within containment in the event the steam line rupture occurs within containment. The OPERABILITY of the main steam isolation valves within the closure times of the Surveillance Requirements are consistent with the assumptions used in the safety analyses.

#### 3/4.7.2 STEAM GENERATOR PRESSURE/TEMPERATURE LIMITATION

The limitation on steam generator pressure and temperature ensures that the pressure-induced stresses in the steam generators do not exceed the maximum allowable fracture toughness stress limits. The limitations of 70°F and 200 psig are based on a steam generator RT<sub>NDT</sub> of 60°F and are sufficient to prevent brittle fracture.

#### 3/4.7.3 COMPONENT COOLING WATER SYSTEM

The OPERABILITY of the Component Cooling Water System ensures that sufficient cooling capacity is available for continued operation of safety-related equipment during normal and accident conditions. The redundant cooling capacity of this system, assuming a single failure, is consistent with the assumptions used in the safety analyses.

#### 3/4.7.4 ESSENTIAL SERVICE WATER SYSTEM

The OPERABILITY of the Essential Service Water System ensures that sufficient cooling capacity is available for continued operation of safety-related equipment during normal and accident conditions. The redundant cooling capacity of this system, assuming a single failure, is consistent with the assumptions used in the accident conditions within acceptable limits.

#### 3/4.7.5 ULTIMATE HEAT SINK

Two cooling tower basins contain water that is immediately available for station cooling. A volume of 200,000 gallons in each basin is reserved for supply to the auxiliary feedwater system (FSAR Q10.1-1) and 90,000 gallons as a minimum inventory for other plant cooling requirements (FSAR Q10.35-1). Alternatively, the inventory of 200,000 gallons is available for transporting heat released from one unit following a loss-of-coolant accident and the second unit during an orderly shutdown. Since this inventory would be exhausted in about 1 day, achievement of the design basis requirement of cooling capability for 30 days is dependent upon redundant makeup systems.

## Technical Specification Bases

### Insert A

The OPERABILITY of the unit crosstie along with the availability of an Essential Service Water pump in the shut down unit ensures the availability of sufficient redundant cooling capacity for the operating unit.



## ATTACHMENT C

### EVALUATION OF SIGNIFICANT HAZARDS CONSIDERATIONS

Byron Station has evaluated the proposed amendment and has determined that it involves no significant hazards considerations. 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.

The proposed amendment makes several changes to Byron's Technical Specifications. These changes are: deleting UHS component description and relocating requirements from 3/4.7.4; revising the applicability statement for 3.7.4.1; replacing bus requirements with a requirement that an SX pump is capable of being started from the Main Control Room; deleting specific flowpath requirements in 4.7.4.1.a.2; adding a surveillance to ensure the available SX pump can be started from the Main Control Room; clarifying the applicability statement for 3/4.7.4.2; clarifying 4.7.4.2.a requirements; and adding a sentence to the Bases describing the crosstie.

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

Periodic testing of the Essential Service Water system crosstie and manipulating during a loss of service water accident have been addressed by Commonwealth Edison (CECo) for Byron and Braidwood stations during the NRC's review of CECo's LCO Relaxation Program and the licensing of Byron Unit 2. Byron Station adopted Technical Specifications governing the availability of the third SX pump and the crosstie valves to support an operating unit. These commitments have been previously reviewed and accepted by the NRC. NRC SER dated November 23, 1988 documents that the NRC staff found the Technical Specifications issued in Amendment 24 acceptable.

The proposed changes do not affect the application of the Technical Specifications. The additional surveillance provides an additional limitation and is therefore more stringent than the current requirements. The rewording

ensures that the specifications are applied uniformly. The proposed change to 3.7.4.1 is more restrictive than the existing specification to ensure that an SX pump from a shut down unit is always available to support operation of the opposite unit. Adding to the Bases has no impact on plant operation; the requirements that ensure that the crosstie will serve its design function are in Specification 3/4.7.4.2.

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

The change is consistent with the previously approved Technical Specifications that were added to address concerns not controlled by existing Technical Specifications. The proposed changes to the original Technical Specifications enhance readability without changing the requirements. The modified specifications are consistent with previous single failure analysis criteria, since they do not delete or modify any current requirements that were utilized in the accident analysis. The proposed addition of controls to verify SX pump availability increases the level of protection. Since there are no changes to equipment or equipment operation, no new accidents or failures are created.

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

The Bases for Technical Specification 3/4.7.4 states that the operability of the SX system ensures that sufficient cooling capacity is available for continued operation of safety related equipment. The proposed changes retain controls to ensure that cooling capacity is available for both units without deleting the requirements for operability of any other Technical Specification. These editorial changes provide enhancements and do not compromise the system's ability to fulfill the function described in the bases. The NRC review of the original Technical Specifications concluded that Byron's SX system has suitable redundancy to transfer heat from structures, systems and components important to safety to a heat sink under both normal operating and accident conditions. The change to the Bases emphasizes the importance of the SX crosstie feature. The refinements to the Technical Specifications enhance the availability of the SX system and crosstie.

Based on the above evaluation, Byron Station has concluded that these changes do not involve significant hazards consideration.



## ATTACHMENT D

### ENVIRONMENTAL ASSESSMENT

Commonwealth Edison has evaluated the proposed amendment against the criteria for and identification of licensing and regulatory actions requiring environmental assessment in accordance with 10CFR51.21. The original Technical Specifications were issued as Amendment 24 to Facility Operating Licenses NPF-37 and NPF-66. In the SER that issued the amendment, dated November 23, 1988, the NRC noted that the amendments met the eligibility criteria for categorical exclusion set forth in 10CFR51.22(c)(9). The NRC had previously issued a proposed finding that the amendment involved no significant hazards consideration.

The changes proposed in this request meet the criteria for a categorical exclusion as provided for under 10CFR51.22(c)(2). This determination is based on the fact that this change is being proposed as an amendment to the regulations in chapter 10 of the Code that are corrective or of a minor or nonpolicy nature and do not substantially modify existing regulations.

## **ATTACHMENT E**

### **DETAILED DESCRIPTION OF THE PROPOSED CHANGES**

#### **Description of the Current Operating License (OL) Requirements:**

Specifications 3/4.7.4 requires that at least two independent Essential Service Water Systems be operable whenever a unit is in Modes 1, 2, 3, or 4.

#### **Bases for the Current OL Requirements:**

The operability of the Essential Service Water System ensures that sufficient cooling capacity is available for continued operation of safety-related equipment during normal and accident conditions. The redundant cooling capacity of this system, assuming a single failure, is consistent with the assumptions in the safety analyses.

#### **Description of the Need for Amending the Technical Specifications:**

This proposed amendment to Braidwood Station Technical Specifications is being made in response to United States Nuclear Regulatory Commission (USNRC) Generic Letter (GL) 91-13, Request for Information Related to the Resolution of Generic Issue 130, "Essential Service Water System Failures at Multi-Unit Sites." In the Commonwealth Edison Company (CECo) response to GL 91-13 by letter dated March 16, 1992, D. J. Chrzanowski to T. E. Murley, Braidwood Station committed to incorporating the current Byron Station Technical Specifications regarding Essential Service Water Systems, including any refinements that Byron Station may make as a result of their operating experience.

This issue has been previously addressed by Byron and Braidwood Stations as a result of a concern identified by the USNRC during their review of WCAP 10526, Byron Generating Station Limiting Condition for Operation Relaxation Program. The Byron Station response to this issue resulted in their current Technical Specifications. Prior to the issuance of the first Unit 1 OL, NPF-59, Braidwood Station made similar commitments by letter dated August 6, 1986, A. D. Miosi to H. R. Denton. The USNRC reviewed and accepted both responses.

### **Description of the Proposed Amendment:**

Braidwood Station proposes to add Specifications 3/4.7.4.1 which would require one Essential Service Water pump on a shut down unit (Mode 5, Mode 6, and with no fuel in the reactor vessel) to be available to support the other unit when it is in an operating mode (Modes 1, 2, 3, and 4).

Braidwood Station also proposes to add Specification 3/4.7.4.2 which would require the Essential Service Water System Unit Crosstie to be open, or capable of being opened from the Main Control Room, whenever either, or both, units are in an operating mode (Modes 1, 2, 3, and 4).

Braidwood Station also proposes to amend the Bases for Specifications 3/4.7.4 to address Essential Service Water System Unit Crosstie and the availability of an Essential Service Water pump on a shut down to provide redundant cooling capacity to an operating unit.

Additionally, Braidwood Station proposes to delete Specification 4.7.4.b.

### **Basis for the Proposed Amendment:**

The proposed Specifications 3/4.7.4.1 ensure that an Essential Service Water pump on a shut down unit be available to support an operating unit providing redundant cooling capacity. These proposed Specifications are the same as the current Byron Station Technical Specifications with the following exceptions:

1. The order of the statement of applicability has been reversed to emphasize the importance of the available Essential Service Water pump on the shut down unit to the operating unit,
2. The phrase "and with no fuel in the reactor vessel" was added to the statement of applicability for the shut down unit to ensure that the Essential Service Water pump was always available to support the operating unit regardless of the condition of the shut down unit,
3. The wording of Specification 4.7.4.1 was reworded for clarity,
4. The word "day" was replaced with "24 hours" in Specification 4.7.4.1.a for consistency with other Specifications,
5. Specification 4.7.4.1.a.1 was revised to be all inclusive of what is actually required for an Essential Service Water pump to be manually started from the Main Control Room. The current Specification only requires that the associated alternating current electrical bus be energized, and

6. Specification 4.7.4.1.a.2 was reworded to require that an Essential Service Water flowpath between units be established, or be capable of being established from the Main Control Room, rather than listing specific valves required to be operable. This revision provides flexibility for maintenance/outage activities on the shut down unit without affecting the ability of the available Essential Service Water pump on the shut down unit to provide a redundant cooling capacity for the operating unit.

The requirements of proposed Specifications 3/4.7.4.1 have been administratively imposed since the initial OL ,NPF-59, for Braidwood Station Unit 1 and are documented with the USNRC by letter dated August 5, 1986, A. D. Miosi to H. R. Denton.

The proposed Specifications 3/4.7.4.2 requires that the Essential Service Water Unit Crosstie be open, or capable of being opened from the Main Control Room, to ensure that the redundant cooling capacity of the Essential Service Water Systems of one unit be available to support the other unit. These proposed Specifications are the same as the current Byron Station Technical Specifications with the following exceptions:

1. The statement of applicability was revised from "MODES 1, 2, 3, and 4" to "Any Unit in MODES 1, 2, 3, and 4." This change was made to emphasize the importance of the availability the the Essential Service Water Unit Crosstie as long as either unit is in an operating mode, and
2. Other editorial revisions were made to improve the clarity of the Specifications.

The requirements of proposed Specifications 3/4.7.4.2 were implied by the flowpath requirements committed to in the August 5, 1936 letter, A. D. Miosi to H. R. Denton, and have been administratively imposed at Braidwood Station to address those times when one unit is shut down and the other unit is operating. When both units are operating, the operability of the Essential Service Water System Unit Crosstie is demonstrated by Specification 4.7.3.3.b.

The proposed revision to the Bases for Specifications 3/4.7.4 is to address the proposed addition of Specifications 3/4.7.4.1 and 3/4.7.4.2.

Braidwood Station proposes to delete Specification 4.7.4.b because of the undue burden expended to satisfy the Specification with no associated increase in the level of safety provided to protect the health and safety of the public. The Essential Service Water System Return Valves, 0SX165A and 0SX165B, are located in valve pits outside of plant buildings but within the Protected Area. These valves are maintained open with power removed as required by the current Specification. The undue burden of this Specification is to verify the the valves are open every 31 days. With power removed, there is no valve position indication available in the Main Control Room. The only way to verify the valves to be open requires the valve pit covers to be removed so that an operator can physically verify valve positions. These valves are not used to isolate the Essential Service Water Systems and, in fact, have not been manipulated since the issuance of the initial OL, NPF-59, for Braidwood Station Unit 1. If these valves were to be closed, there would be significant changes in Essential Service Water System parameters indicated on instrumentation in the Main Control Room which is continuously monitored by licensed operators. Braidwood Station would continue to maintain these valves open with power removed and verify valve position periodically with plant administrative procedures if this proposed amendment is approved.

#### **Schedular Requirements:**

There are no schedular restrictions associated with this change.



**ATTACHMENT F**

**PROPOSED CHANGES TO APPENDIX A  
TECHNICAL SPECIFICATIONS FOR  
FACILITY OPERATING LICENSES  
NPF-72 AND NPF-77**

**Revised Pages**

3/4 7-12  
B 3/4 7-3

**New Pages**

3/4 7-12a  
3/4 7-12b

## PLANT SYSTEMS

### 3/4.7.4 ESSENTIAL SERVICE WATER SYSTEM

#### LIMITING CONDITION FOR OPERATION

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3.7.4 At least two independent Essential Service Water Systems shall be OPERABLE.

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

ACTION:

- a. With only one Essential Service Water System OPERABLE, restore at least two Essential Service Water Systems to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

#### SURVEILLANCE REQUIREMENTS

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4.7.4 At least two Essential Service Water Systems shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying that each valve (manual, pump-operated, or automatic) servicing safety-related equipment is not locked, sealed, or otherwise secured in position is in its correct position.  
*Not used.*
- b. ~~OSK165A and OSK165B shall be verified open and power removed from the valve operators at least once per 31 days.~~
- c. At least once per 18 months during shutdown, by verifying that:
  - 1) Each automatic valve servicing safety-related equipment or isolating the non-nuclear safety-related portion of the system actuates to its correct position on a Safety Injection test signal, and
  - 2) Each Essential Service Water System pump starts automatically on a Safety Injection test signal.

## PLANT SYSTEMS

### ESSENTIAL SERVICE WATER SYSTEM

#### LIMITING CONDITION FOR OPERATION

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3.7.4.1 A Unit 2 (Unit 1) Essential Service Water pump shall be available to support Unit 1 (Unit 2) operation.

APPLICABILITY: Unit 1 (Unit 2) in MODES 1, 2, 3, and 4, with  
Unit 2 (Unit 1) in MODES 5 and 6 and with no fuel  
in the reactor vessel.

#### ACTION:

If neither Unit 2 (Unit 1) Essential Service Water pump is available, restore one pump to available status within 7 days or place Unit 1 (Unit 2) in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

#### SURVEILLANCE REQUIREMENTS

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4.7.4.1 A Unit 2 (Unit 1) Essential Service Water pump shall be demonstrated available to support Unit 1 (Unit 2) operation:

- a. At least once per 24 hours by verifying that:
  - 1) The available Essential Service Water pump is capable of being manually started from the Main Control Room, and
  - 2) An Essential Service Water flowpath is established, or capable of being established from the Main Control Room, from Unit 2 (Unit 1) to Unit 1 (Unit 2).
- b. At least once per 31 days by running the available Essential Service Water pump for 15 minutes.

## PLANT SYSTEMS

### ESSENTIAL SERVICE WATER SYSTEM

#### LIMITING CONDITION FOR OPERATION

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3.7.4.2 The Essential Service Water System Unit Crosstie shall be open, or capable of being opened from the Main Control Room, to provide an Essential Service Water flowpath between Unit 1 and Unit 2.

APPLICABILITY: Any Unit in MODES 1, 2, 3, and 4.

#### ACTION:

- a. With one or both of the crosstie valve(s) closed and not capable of being opened from the Main Control Room, within 7 days restore the valve(s) to available status or open the affected valve(s), and maintain the affected valve(s) open; otherwise be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN in the following 30 hours.
- b. The provisions of Specification 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.7.4.2 The Essential Service Water System Unit Crosstie shall be demonstrated available:

- a. At least once per 92 days by cycling each crosstie valve, 1SX005 and 2SX005, or verifying the valve is locked open with power removed.
- b. The provisions of Specification 4.0.4 are not applicable.

## PLANT SYSTEMS

### BASES

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#### 3/4.7.1.5 MAIN STEAM LINE ISOLATION VALVES

The OPERABILITY of the main steam line isolation valves ensures that no more than one steam generator will blowdown in the event of a steam line rupture. This restriction is required to: (1) minimize the positive reactivity effects of the Reactor Coolant System cooldown associated with the blowdown, and (2) limit the pressure rise within containment in the event the steam line rupture occurs within containment. The OPERABILITY of the main steam isolation valves within the closure times of the Surveillance Requirements are consistent with the assumptions used in the safety analyses.

#### 3/4.7.2 STEAM GENERATOR PRESSURE/TEMPERATURE LIMITATION

The limitation on steam generator pressure and temperature ensures that the pressure-induced stresses in the steam generators do not exceed the maximum allowable fracture toughness stress limits. The limitations of 70°F and 200 psig are based on a steam generator RT<sub>NDT</sub> of 60°F and are sufficient to prevent brittle fracture.

#### 3/4.7.3 COMPONENT COOLING WATER SYSTEM

The OPERABILITY of the Component Cooling Water System ensures that sufficient cooling capacity is available for continued operation of safety-related equipment during normal and accident conditions. The redundant cooling capacity of this system, assuming a single failure, is consistent with the assumptions used in the safety analyses.

#### 3/4.7.4 ESSENTIAL SERVICE WATER SYSTEM

The OPERABILITY of the Essential Service Water System ensures that sufficient cooling capacity is available for continued operation of safety-related equipment during normal and accident conditions. The redundant cooling capacity of this system, assuming a single failure, is consistent with the assumptions used in the accident conditions within acceptable limits.

INSERT A →

#### 3/4.7.5 ULTIMATE HEAT SINK

The limitations on the ultimate heat sink level and temperature ensure that sufficient cooling capacity is available to either 1) provide normal cooldown of the facility, or 2) to mitigate the effects of accident conditions within acceptable limits.

The limitations on minimum water level and maximum temperature are based on providing a 30-day cooling water supply to safety related equipment without exceeding their design basis temperature and is consistent with the recommendations of Regulatory Guide 1.27, "Ultimate Heat Sink for Nuclear Plants," March 1974.



#### Insert A

The OPERABILITY of the unit crosstie along with the availability of an Essential Service Water pump in the shut down unit ensures the availability of sufficient redundant cooling capacity for the operating unit.

## ATTACHMENT G

### EVALUATION OF SIGNIFICANT HAZARDS CONSIDERATIONS

Braidwood Station has evaluated this proposed amendment and determined that it involves no significant hazards considerations. According to Title 10, Code of Federal Regulations, Part 50, Section 92, Paragraph (c) [10 CFR 50.92(c)], a proposed amendment to an operating license involves no significant hazards considerations 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.

Braidwood Station proposes to add Specifications 3/4.7.4.1 which would require one Essential Service Water pump on a shut down unit (Mode 5, Mode 6, and with no fuel in the reactor vessel) to be available to support the other unit when it is in an operating mode (Modes 1, 2, 3, and 4).

Braidwood Station also proposes to add Specification 3/4.7.4.2 which would require the Essential Service Water System Unit Crosstie to be open, or capable of being opened from the Main Control Room, whenever either, or both, units are in an operating mode (Modes 1, 2, 3, and 4).

Braidwood Station also proposes to amend the Bases for Specifications 3/4.7.4 to address Essential Service Water System Unit Crosstie and the availability of an Essential Service Water pump on a shut down to provide redundant cooling capacity to an operating unit.

Additionally, Braidwood Station proposes to delete Specification 4.7.4.b.

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

No additional plant equipment will be installed as a result of any of the proposed changes. Additionally, none of the proposed changes will require currently installed plant equipment to be operated in a new or different manner. Therefore, none of the proposed changes will increase the probability of any accident that has been previously evaluated.

The proposed addition of Specification 3/4.7.4.1 which requires an Essential Service Water pump on a shut down unit be available to support an operating unit and the proposed addition of Specification 3/4.7.4.2 which requires the Essential Service Water System Unit Crossover to be open, or capable of being open from the Main Control Room, any time one or more units are operating are simply the formalization of commitments made to the USNRC by letter dated August 5, 1986, A. D. Miosi to H. R. Denton. These commitments were made as the result of a concern identified by the USNRC regarding a loss of essential service water accident during their review of WCAP 10526, Byron Generating Station Limiting Condition for Operation Relaxation Program. These commitments were made to reduce the consequences of a loss of essential service water accident.

The proposed addition to the Bases of Specifications 3/4.7.4 only serve to describe the addition of proposed Specifications 3/4.7.4.1 and 3/4.7.4.2. Therefore, this proposed change will not increase the consequences of any accident previously evaluated.

The deletion of Specification 4.7.4.b will not cause any physical conditions to be changed at the plant. The Essential Service Water System Return Valves, 0SX165A and 0SX165B, will continue to be maintained in the open position with power removed. Valve position will be verified less frequently than the current Specification and be governed by plant administrative procedures. However, if these valves were to be closed, there would be significant changes in Essential Service Water System parameters indicated on instrumentation in the Main Control Room which is continuously monitored by licensed operators. This does not represent an increase in the consequences of any 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.**

No additional plant equipment will be installed as a result of any of the proposed changes. Additionally, none of the proposed changes will require currently installed plant equipment to be operated in a new or different manner. The proposed additions of Specifications 3/4.7.4.1 and 3/4.7.4.2 and the addition to the Bases of Specifications 3/4.7.4 formalize commitments made to the USNRC by letter dated August 5, 1986, A. D. Miosi to H. R. Denton, and already incorporated into plant administrative procedures. The deletion of Specification 4.7.4.b affects only the manner and frequency by which the Essential Service Water System Return Valves, 0SX165A and 0SX165B, will be verified in the open position. Therefore, there is no possibility of a new or different kind of accident from any accident previously evaluated occurring as a result of these proposed changes.

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

The margin of safety was increased when Braidwood Station committed to make an Essential Service Water pump on a shut down unit available to support an operating unit by providing additional redundant cooling capacity. This commitment was made by letter dated August 5, 1986, A. D. Miosi to H. R. Denton. The proposed additions of Specifications 3/4.7.4.1 and 3/4.7.4.2 and the addition to the Bases of Specifications 3/4.7.4 formalize that commitment in the OL. Formalizing that commitment has no effect on the margin of safety. The proposed deletion of Specification 4.7.4.b affects only the manner and frequency by which the Essential Service Water System Return Valves, 0SX165A and 0SX165B, will be verified in the open position. However, if these valves were to be closed, there would be significant changes in Essential Service Water System parameters indicated on instrumentation in the Main Control Room which is continuously monitored by licensed operators. Therefore, this proposed change also has no effect on the margin of safety.

Based on the above evaluation, Braidwood Station has concluded that these changes do not involve a significant hazards consideration.

## ATTACHMENT H

### ENVIRONMENTAL ASSESSMENT STATEMENT

Braidwood Station has evaluated the proposed amendment against the criteria for and identification of licensing and regulatory actions requiring environmental assessment in accordance with 10 CFR 51.21. It has been determined that the proposed changes meet the criteria for a categorical exclusion as provided for under 10 CFR 51.22(c)(9). This determination is based on the following:

1. These changes are being proposed as an amendment to a license for a reactor pursuant to 10 CFR 50 which change a requirement with respect to:
  - a. Adding a requirement to have an Essential Service Water pump on a shut down unit available to support an operating unit,
  - b. Adding a requirement to have the Essential Service Water Unit Crosstie open, or capable of being opened from the Main Control Room, whenever one, or both, units are in an operating mode, and
  - c. Deleting a requirement to verify that the Essential Service Water System Return Valves, 0SX165A and 0SX165B, are open with power removed at least once per 31 days.
2. the amendment involves no significant hazards consideration,
3. there is no significant increase in the amounts of any effluents that may be released offsite, and
4. there is no significant increase in individual or cumulative occupational radiation exposure.