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March 15, 2000  
BW000028

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D C 20555

Braidwood Station, Units 1 and 2  
Facility Operating License Nos. NPF-72 and NPF-77  
NRC Docket Nos. STN 50-456 and STN 50-457

Subject: Request for a Technical Specification Change Related To Upper  
Temperature Limit for the Ultimate Heat Sink

- References:
- (1) Letter from T. J. Tulon (ComEd) to USNRC, "Request for an Exigent Temporary Technical Specification Change Related to Upper Temperature Limit for the Ultimate Heat Sink," dated July 30, 1999.
  - (2) "NRC Safety Evaluation Related to Amendment No. 103 to Facility Operating License Nos. NPF-72 and NPF-77 to Change the Upper Temperature Limit for the Ultimate Heat Sink," dated September 8, 1999.

In accordance with 10 CFR 50.90, Commonwealth Edison (ComEd) Company proposes a change to Appendix A of the Operating Licenses Nos. NPF-72 and NPF-77, the Technical Specifications (TS), for Braidwood Station, Units 1 and 2, respectively. The proposed change is to TS 3.7.9 "Ultimate Heat Sink (UHS)." The proposed change will revise the temperature limit of the UHS from 98°F to 100°F. The analyses and calculations associated with the UHS assume an initial temperature of 100°F. The overall effect of operation at a UHS temperature of 100°F on safety related equipment affected by the temperature of the UHS was evaluated. The results verify all affected equipment will perform acceptably. Revising the UHS temperature limit will provide additional margin to preclude a TS required dual unit shutdown if the UHS temperature increases above 98°F.

In July 1999, ComEd requested the NRC approve a temporary TS change on an exigent basis (Reference 1) to raise the UHS temperature limit to 100°F due to summer weather conditions. The NRC approved the temporary change as documented in Reference 2.

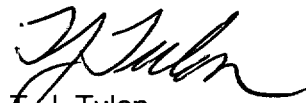
ComEd requests the proposed changes be approved by June 1, 2000, to implement the new temperature limits prior to any adverse summer meteorological conditions that could result in UHS temperatures above 98°F. Attachment A contains a detailed description of the proposed changes and the technical basis for this change. Attachment B provides the proposed markup to and the clean copy of the Braidwood Station TS, and the proposed TS Bases for information only. Attachment C provides information supporting a finding of no significant hazards consideration in accordance with 10 CFR 50.92(c). Attachment D provides information supporting an Environmental Assessment and a finding that the proposed changes satisfy the intent for a categorical exclusion.

The Plant Operations Review Committee and the Nuclear Safety Review Board, in accordance with the ComEd Quality Assurance Program Topical Report, have reviewed the proposed changes.

ComEd is notifying the State of Illinois of this license amendment request by transmitting a copy of this letter and its attachments to the designated State Official.

Should you have any questions related to this request, please contact Mr. T. W. Simpkin, Braidwood Station Regulatory Assurance Manager, at (815) 458-2801 extension 2980.

Respectfully,



T. J. Tulon  
Site Vice President – Braidwood Station

**Attachments:**

Affidavit

Attachment A: Description and Summary Safety Analysis for Proposed Changes

Attachment B: TS Pages for Proposed Changes

Attachment C: Information Supporting a Finding of No Significant Hazards Consideration

Attachment D: Information Supporting an Environmental Assessment

cc: Regional Administrator – NRC Region III  
NRC Senior Resident Inspector – Braidwood Station  
Office of Nuclear Facility Safety – Illinois Department of Nuclear Safety

STATE OF ILLINOIS )  
IN THE MATTER OF: )  
COMMONWEALTH EDISON (COMED) COMPANY ) Docket Numbers  
BRAIDWOOD STATION - UNITS 1 and 2 ) STN 50-456 and STN 50-457  
SUBJECT: Request for a Technical Specification Change Related to Upper Temperature  
Limit for the Ultimate Heat Sink

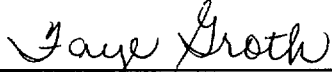
**AFFIDAVIT**

I affirm that the content of this transmittal is true and correct to the best of my knowledge, information and belief.

  
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T. J. Tulon  
Site Vice President – Braidwood Station

Subscribed and sworn to before me, a Notary Public in and  
for the State above named, this 15<sup>th</sup> day of  
March, 2000



  
\_\_\_\_\_  
Notary Public

ATTACHMENT A  
DESCRIPTION AND SUMMARY SAFETY ANALYSIS  
FOR PROPOSED CHANGES

A. SUMMARY OF PROPOSED CHANGES

Pursuant to 10 CFR 50.90, we are requesting a change to the Braidwood Station Technical Specifications (TS). The proposed change to TS 3.7.9, "Ultimate Heat Sink (UHS)," revises the temperature limit of the Braidwood Station Ultimate Heat Sink (UHS) from a current value of less than or equal to 98°F to a value of less than or equal to 100°F.

Analyses have been conducted to demonstrate that Braidwood Station, Units 1 and 2, can safely operate with a UHS temperature higher than 98°F, and that the UHS can continue to perform its intended function without any undue risk to the health and safety of the public.

The proposed changes are described in detail in Section E of this Attachment. The TS pages are contained in Attachment B.

B. DESCRIPTION OF THE CURRENT REQUIREMENTS

TS 3.7.9, "Ultimate Heat Sink (UHS)," requires the UHS to be Operable in Modes 1, 2, 3, and 4, i.e., Power Operation, Startup, Hot Standby, and Hot Shutdown, respectively. In accordance with TS Surveillance Requirement (SR) 3.7.9.2, the UHS is considered Operable if the average water temperature does not exceed 98°F. This SR verifies that the Essential Service Water (i.e., SX) System is available to cool the Component Cooling Water (i.e., CC) System to at least its maximum design temperature with the maximum accident or normal design heat loads for 30 days following a Design Basis Accident.

C. BASIS FOR THE CURRENT REQUIREMENTS

The two principle functions of the UHS are to dissipate heat following a reactor shutdown and to dissipate the residual heat generated by accident conditions. The maximum heat load on the UHS consists of one unit undergoing post-Loss of Coolant Accident (LOCA) cooldown concurrent with a Loss of Offsite Power (LOOP), and the unaffected unit undergoing a safe non-accident shutdown. Both units are assumed to be at full power operation prior to the shutdown. At Braidwood Station, the UHS consists of an excavated essential cooling pond integral with the main cooling pond. For the purpose of this analysis, the main cooling pond is assumed to be unavailable at the beginning of the accident. Only the UHS is assumed to be available. This condition represents the UHS maximum heat load. To perform the principle functions, the UHS must contain a sufficient volume of water at or below the maximum temperature that would allow the Essential Service Water (ESW) System to operate for at least 30 days following the design basis LOCA without the loss of Net Positive Suction Head (NPSH) for the ESW pumps, and without exceeding the maximum design inlet temperature of the equipment served by the ESW system (i.e., 100°F).

ATTACHMENT A  
DESCRIPTION AND SUMMARY SAFETY ANALYSIS  
FOR PROPOSED CHANGES

D. NEED FOR REVISION OF THE REQUIREMENT

Meteorological conditions have caused the temperature of the UHS to approach the current TS limit of 98°F. Revising the UHS temperature limit will preclude a TS required dual unit shutdown if the UHS temperature increases above 98°F. The analyses and calculations associated with the maximum temperature of the UHS assume an initial UHS temperature of 100°F. The effect of operation at a UHS temperature of 100°F on safety related equipment affected by the temperature of the UHS was evaluated. The results verify all associated equipment will perform acceptably.

E. DESCRIPTION OF THE PROPOSED CHANGES

TS SR 3.7.9.2 will be revised to state, "Verify average water temperature of UHS is  $\leq 100^{\circ}\text{F}$ ." The frequency will remain at once per 24 hours.

F. SUMMARY SAFETY ANALYSIS OF THE PROPOSED CHANGES

The UHS is the repository for heat removed from the reactor core following all accidents and anticipated operational occurrences in which the unit is cooled down and Residual Heat Removal (RHR) is placed in operation. The operating limits are based on conservative heat transfer analyses for the worst case LOCA.

The UHS has been evaluated in accordance with Regulatory Guide (RG) 1.27, "Ultimate Heat Sink for Nuclear Power Plants," Revision 2 (Reference). In accordance with RG 1.27, the analysis ensures that a 30 day cooling supply is available and the design basis temperatures of safety related equipment are not exceeded. In addition, the analysis performed for this change used a 5 day, 1 day and 30 day composite as the weather data meteorological conditions.

The maximum heat load on the UHS consists of one unit undergoing post-LOCA cooldown concurrent with a LOOP, and the unaffected unit undergoing a safe non-accident shutdown. Both units are assumed to be at full power operation prior to the shutdown. For the purpose of this analysis, the main cooling pond is assumed to be unavailable at the beginning of the accident. Only the UHS is assumed to be available. The UHS is the source of water for the ESW pumps to cooldown the plant. The analysis demonstrates that for an initial UHS temperature of 100°F, the subsequent UHS temperatures remain below 100°F.

Normally, one ESW pump is operating on each unit. In the design basis UHS scenario, a second pump would start on the LOOP/LOCA unit due to an automatic actuation signal. In the event all four ESW pumps would be operating (i.e., dual unit LOOP event), based on the design ESW flowrates that are achievable through the Component Cooling Water (CCW) heat exchangers, the temperature of the UHS will not exceed 100°F.

On September 8, 1999, the NRC approved a temporary TS change to raise the UHS temperature limit to 100°F due to the summer weather conditions.

ATTACHMENT A  
DESCRIPTION AND SUMMARY SAFETY ANALYSIS  
FOR PROPOSED CHANGES

The following is based on an evaluation of Updated Final Safety Analysis Report (UFSAR) Chapter 6, "Engineered Safety Features," for containment response analyses and UFSAR Chapter 15, "Accident Analysis," for LOCA and non-LOCA analyses.

For containment response analyses, the UHS temperature affects the assumptions for the RHR heat exchanger and the Reactor Containment Fan Cooler (RCFC). A CCW water temperature of 120°F is assumed for the RHR heat exchanger. This CCW water temperature is based on an ESW temperature of 100°F. An ESW temperature of 100°F is already assumed for the inlet temperature to the RCFC. Therefore, the proposed temperature has already been determined to be acceptable by these analyses. The peak containment temperature and pressure and long term containment temperature profile used in establishing the conditions for equipment Environmental Qualification remain unchanged.

For LOCA analyses, the UHS temperature affects the assumption for the RHR heat exchanger. An ESW temperature of 100°F is already assumed for cooling the RHR heat exchanger. Therefore, the proposed temperature has no impact on LOCA analyses and does not result in a change to the calculated peak cladding temperature.

For non-LOCA analyses, the UHS temperature is not used as an input. These analyses do not depend upon heat removal via UHS for mitigation of the consequences of the event. Therefore, the proposed temperature has no impact on non-LOCA analyses.

Specific analyses, field performance tests and manufacturers' specifications presently support a maximum ESW temperature of 100°F. These analyses and tests evaluated the operation of the CCW closed loop system, the Auxiliary Feedwater pumps, the Emergency Core Cooling System pumps, the Containment Spray pumps, the ESW pumps including ESW pump NPSH, the Control Room chillers, the Emergency Diesel Generator, and the RCFCs. This evaluation included the effects on the necessary support equipment. The support equipment includes oil coolers, room cubicle coolers, and jacket water cooling systems.

The risk impact associated with operation with the UHS temperature at 100°F was evaluated qualitatively. Because the proposed temperature has already been determined to be acceptable by the containment pressure response, LOCA and non-LOCA analyses, there is no increase in risk associated with post-accident heat removal. In addition, specific component analyses exist which demonstrate component operation at the proposed ESW maximum temperature. No adverse influences on risk were identified through examination of the Probabilistic Risk Analysis (PRA) model for the plant. This supports the conclusion that there is no risk impact from increasing the UHS temperature to 100°F.

#### G. IMPACT ON PREVIOUS SUBMITTALS

All submittals currently under review by the NRC were evaluated to determine the impact of this submittal. No submittals currently under review are impacted by the information presented in this license amendment request.

ATTACHMENT A  
DESCRIPTION AND SUMMARY SAFETY ANALYSIS  
FOR PROPOSED CHANGES

H. SCHEDULE REQUIREMENTS

ComEd is requesting approval of the proposed change by June 1, 2000, to ensure implementation prior to any adverse summer meteorological conditions. We intend to implement this proposed change upon issuance.

I. REFERENCE

Regulatory Guide 1.27, "Ultimate Heat Sink for Nuclear Power Plants," Revision 2.

ATTACHMENT B  
TS PAGES FOR PROPOSED CHANGES

MARKED UP TS PAGE

TS Page 3.7.9-1

CLEAN COPY PAGE

TS Page 3.7.9-1

TS BASES PAGES (INFORMATION ONLY)

Bases Page B 3.7.9-1  
Bases Page B 3.7.9-2  
Bases Page B 3.7.9-3  
Bases Page B 3.7.9-4



3.7 PLANT SYSTEMS

3.7.9 Ultimate Heat Sink (UHS)

LCO 3.7.9 The UHS shall be OPERABLE.

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

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. UHS inoperable.	A.1 Be in MODE 3.	6 hours
	<u>AND</u> A.2 Be in MODE 5.	36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.9.1 Verify water level of UHS is $\geq$ 590 ft Mean Sea Level (MSL).	24 hours
SR 3.7.9.2 Verify average water temperature of UHS is <del><math>\leq</math> 98°F after September 30, 1999 (<math>\leq</math> 100°F through September 30, 1999).</del> $\leq$ 100°F.	24 hours
SR 3.7.9.3 Verify bottom level of UHS is $\leq$ 584 ft MSL.	18 months

3.7 PLANT SYSTEMS

3.7.9 Ultimate Heat Sink (UHS)

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

ACTIONS

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A. UHS inoperable.	A.1 Be in MODE 3.	6 hours
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SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.9.1 Verify water level of UHS is $\geq$ 590 ft Mean Sea Level (MSL).	24 hours
SR 3.7.9.2 Verify average water temperature of UHS is $\leq$ 100°F.	24 hours
SR 3.7.9.3 Verify bottom level of UHS is $\leq$ 584 ft MSL.	18 months

No Change

UHS  
B 3.7.9

B 3.7 PLANT SYSTEMS

B 3.7.9 Ultimate Heat Sink (UHS)

**INFORMATION ONLY**

BASES

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BACKGROUND

The UHS provides a heat sink for processing and operating heat from safety related components during a transient or accident, as well as during normal operation. This is done by utilizing the Essential Service Water (SX) System and the Component Cooling Water (CC) System.

The UHS consists of an excavated essential cooling pond integral with the main cooling pond, and the piping and valves connecting the pond with the SX System pumps. The UHS is described in UFSAR, Section 9.2.5 (Ref. 1). The two principal functions of the UHS are the dissipation of residual heat after reactor shutdown, and dissipation of residual heat after an accident.

The basic performance requirements are that a 30 day supply of water be available, and that the design basis temperatures of safety related equipment not be exceeded. The UHS is sufficiently oversized to permit a minimum of 30 days of operation with no makeup.

Additional information on the design and operation of the system, along with a list of components served, can be found in Reference 1.

**INFORMATION ONLY**BASES

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APPLICABLE  
SAFETY ANALYSES

The UHS is the sink for heat removed from the reactor core following all accidents and anticipated operational occurrences in which the unit is cooled down and placed on Residual Heat Removal (RHR) operation. The UHS is also the normal heat sink for condenser cooling via the Circulating Water System. Unit operation at full power represents the UHS maximum heat load. Its maximum post accident heat load occurs 20 minutes after a design basis Loss Of Coolant Accident (LOCA). Near this time, the unit switches from injection to recirculation and the containment cooling systems and RHR are required to remove the core decay heat.

The operating limits are based on conservative heat transfer analyses for the worst case LOCA. Reference 1 provides the details of the assumptions used in the analysis, which include worst expected meteorological conditions, conservative uncertainties when calculating decay heat, and worst case single active failure (e.g., single failure of a manmade structure). The UHS is designed in accordance with Regulatory Guide 1.27 (Ref. 2), which requires a 30 day supply of cooling water in the UHS.

The UHS satisfies Criterion 3 of 10 CFR 50.36(c)(2)(ii).

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## LCO

The UHS is required to be OPERABLE and is considered OPERABLE if it contains a sufficient volume of water at or below the maximum temperature that would allow the SX System to operate for at least 30 days following the design basis LOCA without the loss of Net Positive Suction Head (NPSH), and without exceeding the maximum design temperature of the equipment served by the SX System. To meet this condition, the UHS temperature should not exceed 100°F and the level should not fall below 590 ft mean sea level during normal unit operation.

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## APPLICABILITY

In MODES 1, 2, 3, and 4, the UHS is required to support the OPERABILITY of the equipment serviced by the UHS and required to be OPERABLE in these MODES.

In MODE 5 or 6, the OPERABILITY requirements of the UHS are determined by the systems it supports.

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# INFORMATION ONLY

UHS  
B 3.7.9

## BASES

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### ACTIONS (continued)

#### ACTIONS

##### A.1 and A.2

If the UHS is inoperable, the unit must be placed in a MODE in which the LCO does not apply. To achieve this status, the unit must be placed in at least MODE 3 within 6 hours and in MODE 5 within 36 hours.

The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging plant systems.

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#### SURVEILLANCE REQUIREMENTS

##### SR 3.7.9.1

This SR verifies that adequate long term (30 day) cooling can be maintained. The specified level also ensures that sufficient NPSH is available to operate the SX pumps. The 24 hour Frequency is based on operating experience related to trending of the parameter variations during the applicable MODES. This SR verifies that the UHS water level is  $\geq 590$  ft mean sea level United States Geological Society datum.

##### SR 3.7.9.2

This SR verifies that the SX System is available to cool the CC System to at least its maximum design temperature with the maximum accident or normal design heat loads for 30 days following a Design Basis Accident. The 24 hour Frequency is based on operating experience related to trending of the parameter variations during the applicable MODES. This SR verifies that the average water temperature of the UHS is  $\leq 100^{\circ}\text{F}$ , as measured at the discharge of an SX pump.

No Change

**INFORMATION ONLY**

UHS  
B 3.7.9

BASES

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SURVEILLANCE REQUIREMENTS (continued)

SR 3.7.9.3

This surveillance verifies that the UHS contains adequate storage volume to supply the required design basis inventory to support the function of the essential service water system. SR 3.7.9.1 verifies the contained volume of the UHS, while this SR verifies that the UHS, if filled to the depth required by SR 3.7.9.1, can supply the water required to support the safety function of the system.

SR 3.7.9.3 assures that the bottom elevation of the UHS is less than or equal to 584 ft Mean Sea Level (MSL). This surveillance is performed by means of a hydrographic survey, once every 18 months. The frequency is based on engineering judgement and the likelihood that any geologic or natural event that significantly altered the bottom elevation of the UHS in a shorter period would be identified by other means.

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REFERENCES

1. UFSAR, Section 9.2.5.
2. Regulatory Guide 1.27.

ATTACHMENT C  
INFORMATION SUPPORTING A FINDING OF NO SIGNIFICANT HAZARDS  
CONSIDERATION

Commonwealth Edison (ComEd) Company has evaluated the proposed change and determined that it does not involve a significant hazards consideration. According to 10 CFR 50.92(c), a proposed amendment to an operating license involves no significant hazards consideration if operation of the facility in accordance with the proposed amendment would not:

Involve a significant increase in the probability of occurrence or consequences of any accident previously evaluated; or

Create the possibility of a new or different kind of accident from any previously analyzed; or

Involve a significant reduction in a margin of safety.

The determination that the criteria set fourth in 10 CFR 50.92 are met for this amendment request is indicated below.

**Does the change involve a significant increase in the probability or consequences of any accident previously evaluated?**

Analyzed accidents are assumed to be initiated by the failure of plant structures, systems or components. An inoperable Ultimate Heat Sink (UHS), which is the source of water for the Essential Service Water (ESW) System, is not considered as an initiator of any analyzed events. The analyses for Braidwood Station, Units 1 and 2, assume a UHS temperature of 100°F. Therefore, continued operation with a UHS temperature less than or equal to 100°F will not increase the probability of occurrence of any accident previously evaluated in the Updated Final Safety Analysis Report (UFSAR). The proposed change does not involve any physical alteration of plant systems, structures or components. A UHS temperature of up to 100°F does not increase the failure rate of systems, structures or components because the systems, structures or components are rated and analyzed for operation with ESW temperatures of 100°F and the design allows for higher temperatures than at which they presently operate.

The basis provided in Regulatory Guide 1.27 "Ultimate Heat Sink for Nuclear Power Plants," Revision 2, dated January 1976, was employed for the temperature analysis of the Braidwood Station UHS to implement General Design Criteria (GDC) 44, "Cooling water," and GDC 2, "Design bases for protection against natural phenomena," of Appendix A to 10 CFR Part 50. This Regulatory Guide was employed for both the original design/licensing basis of the Braidwood Station UHS and a subsequent evaluation which investigated the potential for increasing the average water temperature of the UHS from  $\leq 98^{\circ}\text{F}$  to  $\leq 100^{\circ}\text{F}$ . The heat loads selected for the UHS analysis considered one Braidwood Station unit in a Loss of Coolant Accident (LOCA) condition concurrent with a Loss Of Offsite Power (LOOP) event and the remaining Braidwood Station unit undergoing a safe non-accident shutdown. In the analysis, these heat loads are removed by the UHS using only ESW pumps. The main cooling pond is conservatively assumed not to be available at the start of the event. The analysis shows that with an initial UHS temperature of 100°F, the required heat loads can be met for 30 days while maintaining ESW temperatures at acceptable values.

ATTACHMENT C  
INFORMATION SUPPORTING A FINDING OF NO SIGNIFICANT HAZARDS  
CONSIDERATION

Based on the above, it has been demonstrated that the operation at an initial UHS temperature of  $\leq 100^{\circ}\text{F}$  at the start of the design basis event will result in the continued ability of the equipment and components supplied by the ESW system to perform their intended safety functions.

Therefore, increasing the average water temperature limit of the UHS from  $\leq 98^{\circ}\text{F}$  to  $\leq 100^{\circ}\text{F}$  does not increase the consequences of any accident previously evaluated. Raising this limit does not introduce any new equipment, equipment modifications, or any new or different modes of plant operation, nor does it affect the operational characteristics of any equipment or systems. Therefore, this proposed change does not involve a significant increase in the probability or consequences of any accident previously evaluated.

**Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?**

The proposed change does not involve a physical alteration of the units. There is no change being made to the parameters within which the units are operated that is not bounded by the analyses. There are no setpoints at which protective or mitigative actions are initiated that are affected by this proposed change. This proposed change will not alter the manner in which equipment operation is initiated, nor will the function demands on credited equipment be changed. No alteration in the procedures that ensure the units remain within analyzed limits is proposed, and no change is being made to procedures relied upon to respond to an off-normal event. As such, no new failure modes are being introduced. The proposed change does not alter assumptions made in the safety analysis.

Increasing the allowed average water temperature of the UHS in Technical Specification (TS) 3.7.9, "Ultimate Heat Sink (UHS)," has no impact on plant operation. Operating at the proposed higher temperature limit does not introduce new failure mechanisms for systems, structures or components. The engineering analyses performed to support the change to UHS temperature limit provides the basis to conclude that the equipment is designed for operation at elevated temperatures. The current analyses and calculations assume a UHS temperature of  $100^{\circ}\text{F}$ , which is within the design limits of the affected equipment. In addition, design and construction codes applied to the affected structures, systems and components provided sufficient margin to accommodate the proposed temperature change.

Therefore, this proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.



ATTACHMENT C  
INFORMATION SUPPORTING A FINDING OF NO SIGNIFICANT HAZARDS  
CONSIDERATION

**Does the change involve a significant reduction in a margin of safety?**

The proposed change allows operation with the UHS temperature  $\leq 100^{\circ}\text{F}$ . The margin of safety is determined by the design and qualification of the plant equipment, the operation of the plant within analyzed limits, and the point at which protective or mitigative actions are initiated. The proposed change does not impact these factors. The existing analyses already assume an initial UHS temperature of  $100^{\circ}\text{F}$  for design basis accident conditions. There are no required design changes or equipment performance parameter changes associated with this change. No protection setpoints are affected as a result of this change. This temperature increase has been confirmed to not change the operational characteristics of the design of any equipment or system. All accident analysis assumptions and conditions will continue to be met. Thus, the proposed increase in UHS temperature does not involve a significant reduction in the margin of safety.

**Conclusion**

Therefore, based on the above evaluation, ComEd has concluded that this proposed change involves no significant hazards consideration.

ATTACHMENT D  
INFORMATION SUPPORTING AN ENVIRONMENTAL ASSESSMENT

Commonwealth Edison (ComEd) Company has evaluated this proposed Technical Specification change against the criteria for identification of licensing and regulatory actions requiring environmental assessment in accordance with 10 CFR 51.21. We have determined that this requested action meets the criteria for a categorical exclusion set forth in 10 CFR 51.22(c)(9) and as such, we have determined that no irreversible consequences exist in accordance with 10 CFR 50.92(b). This determination is based on the fact that this change is being proposed as an amendment to a license issued pursuant to 10 CFR 50 that reflects a requirement with respect to the use of a facility component located within the restricted area, as defined in 10 CFR 20, and the action meets the following specific criteria.

- A. As demonstrated in Attachment C of this submittal, this proposed action does not involve any significant hazards consideration.
- B. There is no significant change in the types or significant increase in the amounts of any effluent that may be released offsite. The proposed action does not affect the generation of any radioactive effluent. The proposed action would allow the operation of Braidwood Station, Units 1 and 2, with the Ultimate Heat Sink temperature up to and including 100°F. Plant equipment would operate as expected in the event of an accident to minimize the potential for any leakage of radioactive effluents.
- C. There is no significant increase in individual or cumulative occupational radiation exposure. The proposed action will not change the level of controls or methodology used for processing of radioactive effluents or handling of solid radioactive waste, nor will the proposed action result in any change in the normal radiation levels within the plant. Therefore, there will be no increase in individual or cumulative occupational radiation exposure resulting from this change.