

United States Nuclear Regulatory Commission

Attachment III to Serial: RNP-RA/99-0068

6 Pages

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

REQUEST FOR TECHNICAL
SPECIFICATIONS CHANGE ULTIMATE HEAT SINK (UHS)

MARKUP OF CURRENT TECHNICAL SPECIFICATIONS
AND BASES PAGES

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3.7 PLANT SYSTEMS

3.7.8 Ultimate Heat Sink (UHS)

LCO 3.7.8 The UHS shall be OPERABLE.

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

ACTIONS

NOTES

1. ~~Conditions A and B and associated Required Actions and Completion Times shall only be applicable prior to, and on September 30, 1998.~~
2. ~~Condition C and associated Required Actions and Completion Times shall only be applicable after September 30, 1998.~~

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>A. Service water temperature > 95°F.</p>	<p>A.1 Restore service water temperature to ≤ 95°F.</p>	<p>8 hours</p>
	<p>AND</p> <p>A.2 Verify service water temperature is ≤ 99°F.</p>	<p>1 hour</p> <p>AND</p> <p>Once per hour thereafter</p>

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. Required Action and Completion Time of Condition A not met. <u>OR</u> UHS inoperable for reasons other than Condition A.	B.1 Be in MODE 3.	6 hours
	<u>AND</u>	
	B.2 Be in MODE 5.	36 hours
C. UHS inoperable.	C.1 Be in MODE 3.	6 hours
	<u>AND</u>	
	C.2 Be in MODE 5.	36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.8.1 Verify water level of UHS is \geq 218 ft mean sea level.	24 hours
SR 3.7.8.2 Verify service water temperature is \leq 95°F.	24 hours

OR
Service water temperature > 99°F.

BASES

APPLICABLE
SAFETY ANALYSES
(continued)

The UHS satisfies Criterion 3 of the NRC Policy Statement.

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 SWS to operate for at least 22 days following the design basis LOCA without the loss of NPSH, and without exceeding the maximum design temperature of the equipment served by the SWS. To meet this condition, the UHS temperature should not exceed 95°F and the level should not fall below 218 ft MSL during normal unit operation.

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.

ACTIONS

~~Notes 1 and 2 have been added in the ACTIONS to provide a clear expiration date for Conditions A and B and associated Required Actions and Completion Times, and a date that Condition C and its associated Required Actions and Completion Times will become applicable. Prior to midnight October 1, 1998, if the LCO is not met, refer to Conditions A or B and associated Required Actions and Completion Times. On midnight October 1, 1998, and thereafter, refer only to Condition C if the LCO is not met.~~

A.1

When service water temperature is greater than 95°F, it must be restored to $\leq 95^\circ\text{F}$ within 8 hours. This Required Action is necessary to return operation to within the design basis of the Service Water System. The 8 hour Completion Time is acceptable considering the low probability of a Design Basis

(continued)

BASES

ACTIONS

~~A.1 and A.2~~ (continued)

Accident occurring during this period and allows a reasonable time for diurnal effects to act upon the UHS.

~~The service water temperature must be monitored more frequently to ensure service water temperatures stay at or below 99°F so that no loss of function occurs for equipment cooled by the UHS. The Completion Time of 1 hour is reasonable considering the limited time that Required Action A.1 allows the service water temperature limit to be exceeded in conjunction with the generally slow rate of temperature increase experienced from thermal changes in Lake Robinson.~~

is

B.1 and B.2

, or service water temperature exceeds 99°F,

If Required Actions ~~A.1 and A.2~~ and Completion Times ~~are~~ not met or the UHS is inoperable for reasons other than Condition A, 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 service water temperature must be 99°F or less to ensure operability of the components supplied by the Service Water System.

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 unit systems.

~~C.1, and C.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 unit systems.~~

(continued)

BASES (continued)

SURVEILLANCE
REQUIREMENTSSR 3.7.8.1

This SR verifies that adequate long term (22 day) cooling can be maintained. The specified level also ensures that sufficient NPSH is available to operate the SWS 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 218 ft MSL.

SR 3.7.8.2

This SR verifies that the SWS is available to cool the CCW 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 service water temperature is \leq 95°F.

REFERENCES

1. UFSAR, Section 9.2.4.
2. UFSAR Section 2.4.6.1.
3. UFSAR Section 2.1.1.2.
4. NUREG-75/024, "Final Environmental Statement Related to the Operation of H. B. Robinson Nuclear Steam-Electric Plant Unit 2," U. S. Nuclear Regulatory Commission, Washington DC 20555, April 1975, page 3-7.
5. USGS Historical Daily Values for Station Number 02130900, Black Creek Near McBee, South Carolina, Years 1960-1993.

United States Nuclear Regulatory Commission
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6 Pages

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

REQUEST FOR TECHNICAL
SPECIFICATIONS CHANGE ULTIMATE HEAT SINK (UHS)

RETYPED TECHNICAL SPECIFICATIONS AND BASES

3.7 PLANT SYSTEMS

3.7.8 Ultimate Heat Sink (UHS)

LCO 3.7.8 The UHS shall be OPERABLE.

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

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>A. Service water temperature > 95°F.</p>	<p>A.1 Restore service water temperature to ≤ 95°F.</p>	<p>8 hours</p>
<p>B. Required Action and Completion Time of Condition A not met.</p> <p><u>OR</u></p> <p>Service water temperature > 99°F.</p> <p><u>OR</u></p> <p>UHS inoperable for reasons other than Condition A.</p>	<p>B.1 Be in MODE 3.</p> <p><u>AND</u></p> <p>B.2 Be in MODE 5.</p>	<p>6 hours</p> <p>36 hours</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.8.1	Verify water level of UHS is \geq 218 ft mean sea level.	24 hours
SR 3.7.8.2	Verify service water temperature is \leq 95°F.	24 hours

BASES

APPLICABLE
SAFETY ANALYSES
(continued)

The UHS satisfies Criterion 3 of the NRC Policy Statement.

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 SWS to operate for at least 22 days following the design basis LOCA without the loss of NPSH, and without exceeding the maximum design temperature of the equipment served by the SWS. To meet this condition, the UHS temperature should not exceed 95°F and the level should not fall below 218 ft MSL during normal unit operation.

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.

ACTIONS

A.1

When service water temperature is greater than 95°F, it must be restored to $\leq 95^\circ\text{F}$ within 8 hours. This Required Action is necessary to return operation to within the design basis of the Service Water System. The 8 hour Completion Time is acceptable considering the low probability of a Design Basis Accident occurring during this period and allows a reasonable time for diurnal effects to act upon the UHS.

B.1 and B.2

If Required Action A.1 and Completion Time is not met, or service water temperature exceeds 99°F, or the UHS is inoperable for reasons other than Condition A, 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.

(continued)

BASES

ACTIONS

B.1 and B.2 (continued)

The service water temperature must be 99°F or less to ensure operability of the components supplied by the service water system.

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 unit systems.

SURVEILLANCE
REQUIREMENTS

SR 3.7.8.1

This SR verifies that adequate long term (22 day) cooling can be maintained. The specified level also ensures that sufficient NPSH is available to operate the SWS 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 218 ft MSL.

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REFERENCES

1. UFSAR, Section 9.2.4.
2. UFSAR Section 2.4.6.1.
3. UFSAR Section 2.1.1.2.

(continued)

BASES

REFERENCES
(continued)

4. NUREG-75/024, "Final Environmental Statement Related to the Operation of H. B. Robinson Nuclear Steam-Electric Plant Unit 2," U. S. Nuclear Regulatory Commission, Washington DC 20555, April 1975, page 3-7.
 5. USGS Historical Daily Values for Station Number 02130900, Black Creek Near McBee, South Carolina, Years 1960-1993.
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