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*Energy to Serve Your World™*

April 26, 2004

Docket Nos.: 50-424  
50-425

NL-04-0238

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D. C. 20555-0001

Vogtle Electric Generating Plant  
Request to Revise Technical Specifications – Ultimate Heat Sink

Ladies and Gentlemen:

In accordance with the requirements of 10 CFR 50.90, Southern Nuclear Operating Company (SNC) proposes to revise the Vogtle Electric Generating Plant (VEGP) Unit 1 and Unit 2 Technical Specifications (TS). The proposed changes would revise TS Limiting Conditions for Operation (LCO) 3.7.9, "Ultimate Heat Sink (UHS)."

The proposed changes are as follows:

- Revise the LCO statement to require four fans and four spray cells per train to be operable when ambient wet-bulb temperature is  $> 63^{\circ}\text{F}$ . With ambient wet-bulb temperature  $\leq 63^{\circ}\text{F}$ , only three fans and four spray cells are required to be operable;
- Revise Condition B to "One NSCW cooling tower with one or more required fans and/or spray cells inoperable";
- Add SR 3.7.9.5 to verify ambient wet-bulb temperature when one NSCW tower fan is out-of-service;
- Revise Required Action B.1 to "Restore required fan(s) and spray cells to OPERABLE status"; and
- Revise Surveillance Requirement (SR) 3.7.9.3 to state "Operate each required NSCW cooling tower fan for  $\geq 15$  minutes."

Enhanced Bases are provided consistent with the above changes.

The proposed changes and their basis are described in Enclosure 1. An evaluation demonstrating that the proposed changes do not involve a significant hazard as defined in 10 CFR 50.92 is provided in Enclosure 2. Marked-up TS and Bases pages are provided in Enclosure 3, and clean-typed pages are provided in Enclosure 4. SNC requests approval of the proposed changes by April 29, 2005. The proposed changes would be implemented within 90 days of issuance of the amendment.

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Mr. J. T. Gasser states he is a Vice President of Southern Nuclear Operating Company, is authorized to execute this oath on behalf of Southern Nuclear Operating Company, and to the best of his knowledge and belief, the facts set forth in this letter are true.

This letter contains no NRC commitments. If you have any questions, please advise.

Respectfully submitted,

SOUTHERN NUCLEAR OPERATING COMPANY



Jeffrey T. Gasser

Sworn to and subscribed before me this 26<sup>th</sup> day of April, 2004.



Notary Public

My commission expires: 11/10/06

JTG/KGL/daj

- Enclosures:
1. Basis for Proposed Changes
  2. No Significant Hazard Consideration Evaluation
  3. Marked-up TS and Bases Pages
  4. Clean-typed TS and Bases Pages

cc: Southern Nuclear Operating Company  
Mr. J. B. Beasley, Executive Vice President  
Mr. W. F. Kitchens, General Manager – Plant Vogtle  
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Document Services RTYPE: CVC7000

U. S. Nuclear Regulatory Commission  
Mr. L. A. Reyes, Regional Administrator  
Mr. C. Gratton, NRR Project Manager – Vogtle  
Mr. J. Zeiler, Senior Resident Inspector – Vogtle

State of Georgia  
Mr. L. C. Barrett, Commissioner – Department of Natural Resources

## Enclosure 1

### Vogtle Electric Generating Plant Request to Revise Technical Specifications – Ultimate Heat Sink

#### Basis for Proposed Changes

#### Proposed Changes

Southern Nuclear Operating Company (SNC) proposes to revise the Vogtle Electric Generating Plant (VEGP) Unit 1 and Unit 2 Technical Specifications (TS). The proposed changes would revise TS Limiting Conditions for Operation (LCO) 3.7.9, “Ultimate Heat Sink (UHS).” The proposed changes would:

- Revise the LCO statement to require four fans and four spray cells per train to be operable when ambient wet-bulb temperature is  $> 63^{\circ}$  F. With ambient wet-bulb temperature  $\leq 63^{\circ}$  F, only three fans and four spray cells are required to be operable;
- Revise Condition B to “One NSCW cooling tower with one or more required fans and/or spray cells inoperable”;
- Add SR 3.7.9.5 to verify ambient wet-bulb temperature when one NSCW tower fan is out-of-service;
- Revise Required Action B.1 to “Restore required fan(s) and spray cells to OPERABLE status”; and
- Revise Surveillance Requirement (SR) 3.7.9.3 to state “Operate each required NSCW cooling tower fan for  $\geq 15$  minutes.”

Enhanced Bases are provided consistent with the above changes.

#### Bases for Proposed Changes

At VEGP, the ultimate heat sink (UHS) consists of the nuclear service cooling water (NSCW) system mechanical draft towers. Two 100% capacity redundant NSCW towers are provided for each unit. One tower is associated with each train of the NSCW System. Each NSCW tower consists of a basin that contains the ultimate heat sink water supply and an upper structure that contains four individual fan spray cells where the heat loads are transferred to the atmosphere. Each spray cell contains one safety-related temperature controlled fan. Instrumentation is provided for monitoring basin level and water temperature. The tower basins each contain a safety-related transfer pump to permit the use of the combined storage capacity of the basins. The combined storage capacity of two tower basins provides greater than a 30-day cooling water supply assuming the worst combination of meteorological conditions and accident heat loads which maximize the tower heat load, basin temperature, and evaporative losses.

TS LCO 3.7.9, “Ultimate Heat Sink (UHS),” simply requires that the UHS be operable. The LCO discussion of the Bases for LCO 3.7.9 defines an operable UHS as containing a sufficient volume of water at or below the maximum temperature that would allow the NSCW system to operate for at least 30 days following a design basis LOCA without the loss of net positive suction head, and without exceeding the maximum design temperature of the equipment served by the NSCW system. Specifically, the Bases state, in part, that two NSCW tower basins are required operable with two operable trains of NSCW tower fans, each train consisting of four fans and associated spray cells.

## Enclosure 1

### Vogtle Electric Generating Plant Request to Revise Technical Specifications -- Ultimate Heat Sink

#### Basis for Proposed Changes

##### LCO 3.7.9

The first change to LCO 3.7.9 is to revise the operability requirements based on ambient wet-bulb temperature. The following would be added to the LCO statement:

“With ambient wet-bulb temperature > 63° F, four fans and four spray cells per train shall be OPERABLE. With ambient wet-bulb temperature ≤ 63° F, three fans and four spray cells per train shall be OPERABLE.”

The proposed change will facilitate maintenance on the NSCW tower fans without requiring a train of NSCW to be out of service. A review of the cooling tower design criteria found that the tower was designed for four-fan operation at an ambient wet-bulb temperature of 82° F and an NSCW flow rate of 15,600 gpm. These design conditions were imposed on the vendor (Marley) to support normal operation, shutdown, and emergency operations.

Existing system calculations evaluate postulated accidents in which a single train of NSCW with four tower fans in operation maintains the tower cold water temperature at acceptable temperature limits. In order to support operation with one fan out-of-service, the Marley cooling tower performance curves were reviewed to determine the ambient wet-bulb temperature at which three fans could provide the same emergency cooling. This temperature is 67° F.

Existing system calculations also evaluate a postulated accident in which a single train of NSCW with three tower fans in operation maintain the tower cold water temperature at acceptable temperature limits with a LOSP (one fan lost from service due to a tornado). In order to support operation with one fan out-of-service, and given these conditions, the Marley cooling tower performance curves were reviewed to determine the ambient wet-bulb temperature at which two fans could provide the same emergency cooling. This temperature is 63° F.

To determine the ambient wet-bulb temperature at which a fan could be removed from service and maintain required cooling capacity, the more limiting ambient temperature value of 63° F ambient wet-bulb for the postulated LOSP with tornado is used. One fan can be removed from service during Modes 1, 2, 3, and 4 whenever the ambient wet-bulb temperature is 63° F or lower. The capacity of the cooling tower with one less fan cell will provide sufficient cooling capacity to satisfy all normal and accident conditions. This assumes that the plant maintenance operation does not prevent natural draft through the non-operating fan and that the tower water distribution system remains intact. Condition B and Required Action B.1 and SR 3.7.9.3 are modified to reflect this proposed change by inserting the word “required” to reflect that not all fans are required based on ambient wet-bulb temperature.

Condition B allowed one or both NSCW towers to be impacted. Condition B is modified to be more restrictive by addressing only the condition where one NSCW tower is impacted.

The final change made to LCO 3.7.9 is editorial and clarifies CONDITION B under ACTIONS.

## Enclosure 2

### Vogtle Electric Generating Plant Request to Revise Technical Specifications – Ultimate Heat Sink

#### Significant Hazard Consideration Evaluation

##### Proposed Changes

Southern Nuclear Operating Company (SNC) proposes to revise the Vogtle Electric Generating Plant (VEGP) Unit 1 and Unit 2 Technical Specifications (TS). The proposed changes would revise TS Limiting Conditions for Operation (LCO) 3.7.9, "Ultimate Heat Sink (UHS)." The UHS provides a heat sink for the nuclear service cooling water (NSCW) system. The proposed changes would:

- Revise the LCO statement to require four fans and four spray cells per train to be operable when ambient wet-bulb temperature is  $> 63^{\circ}$  F. With ambient wet-bulb temperature  $\leq 63^{\circ}$  F, only three fans and four spray cells are required to be operable;
- Revise Condition B to "One NSCW cooling tower with one or more required fans and/or spray cells inoperable";
- Added SR 3.7.9.5 to verify ambient wet-bulb temperature when one NSCW tower fan is out-of-service;
- Revise Required Action B.1 to "Restore required fan(s) and spray cells to OPERABLE status"; and
- Revise Surveillance Requirement (SR) 3.7.9.3 to state "Operate each required NSCW cooling tower fan for  $\geq 15$  minutes."

Enhanced Bases are provided consistent with the above changes.

##### Evaluation

1. Do the proposed changes involve a significant increase in the probability or consequences of an accident previously evaluated?

No. The revised requirements will maintain OPERABILITY while allowing maintenance on one fan when ambient wet-bulb temperature is  $63^{\circ}$  F or lower. Modifying the condition where one NSCW tower is impacted is more restrictive. The UHS is not an initiator to any analyzed accident sequence. Operation in accordance with the proposed TS will continue to ensure that the UHS remains capable of performing its safety function and that all analyzed accidents will continue to be mitigated as previously analyzed. Therefore, the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Do the proposed changes create the possibility of a new or different kind of accident from any previously evaluated?

No. The proposed changes do not introduce any new equipment, create new failure modes for existing equipment, or create any new limiting single failures. Plant operation will not be altered, and all safety functions previously addressed in accident analyses will continue to be performed. Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any previously evaluated.

3. Do the proposed changes involve a significant reduction in a margin of safety?

No. The proposed changes will not adversely affect operation of plant equipment – principally the UHS and the equipment supported by it. Modifying the condition where one NSCW tower is impacted is more restrictive and enhances the margin of safety. Therefore, the proposed changes do not involve a significant reduction in any margin of safety.

**Enclosure 3**

**Vogtle Electric Generating Plant  
Request to Revise Technical Specifications – Ultimate Heat Sink**

**Marked-up Technical Specification and Bases Pages**

**Affected Pages**

**3.7.9-1**

**3.7.9-3**

**B 3.7.9-2**

**B3.7.9-4**

**B3.7.9-5**

3.7 PLANT SYSTEMS

3.7.9 Ultimate Heat Sink (UHS)

LCO 3.7.9      The UHS shall be OPERABLE. With ambient wet-bulb temperature > 63°F, four fans and four spray cells per train shall be OPERABLE. With ambient wet-bulb temperature < 63°F, three fans and four spray cells per train shall be OPERABLE.

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

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more Nuclear Service Cooling Water (NSCW) basins with water temperature and/or water level not within limits.	A.1 Restore water temperature(s) and water level(s) to within limits.	72 hours
B. One or more NSCW cooling towers with one or more <u>required inoperable fans</u> and/or <u>spray cells inoperable</u> .	B.1 Restore fan(s) and spray cell(s) to OPERABLE status.	72 hours

(continued)

**SURVEILLANCE REQUIREMENTS**

SURVEILLANCE		FREQUENCY
SR 3.7.9.1	Verify water level of NSCW basin is $\geq 80.25$ ft.	24 hours
SR 3.7.9.2	Verify water temperature of NSCW basin is $\leq 90^{\circ}\text{F}$ .	24 hours
SR 3.7.9.3	Operate each <u>required</u> NSCW cooling tower fan for $\geq 15$ minutes.	31 days
SR 3.7.9.4	Verify NSCW basin transfer pump operation.	In accordance with the Inservice Testing Program
<u>SR 3.7.9.5</u>	<u>Verify ambient wet-bulb temperature <math>&lt; 63^{\circ}\text{F}</math> when one NSCW tower fan is out-of-service and daily high temperature (dry-bulb) is forecasted to be <math>&gt; 48^{\circ}\text{F}</math>.</u>	<u>24 Hours</u>



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BASES

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APPLICABLE  
SAFETY ANALYSES  
(continued)

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 NSCW 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 NSCW.

In order to meet these requirements, two NSCW tower basins are required OPERABLE with the following:

1. Basin water level must be  $\geq 80.25$  feet as measured from the bottom of the basin (73% of instrument span),
  2. Basin water temperature must be  $\leq 90^{\circ}\text{F}$ ,
  3. Two OPERABLE trains of NSCW tower fans, each train consisting of four fans and four associated spray cells when ambient wet-bulb temperature  $> 63^{\circ}\text{F}$  or three fans and four spray cells (sprays and natural draft through the non-operating fan) when ambient wet-bulb temperature  $< 63^{\circ}\text{F}$ , and
  4. Two OPERABLE NSCW basin transfer pumps.
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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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(continued)

BASES

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ACTIONS  
(continued)

D.1 and D.2

If the Required Actions of Conditions A, B, or C are not completed within their associated Completion Times or if the UHS is inoperable for reasons other than described in Conditions A, B, or C, 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 in 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.

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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 NSCW System 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  $\geq 80.25$  feet (plant elevation of 217 feet-3 inches or 73% of instrument span on LI-1606 and LI-1607).

SR 3.7.9.2

This SR verifies that the NSCW System 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 water temperature of the UHS is  $\leq 90^{\circ}\text{F}$  (TJI-1690 and TJI-1691).

SR 3.7.9.3

Operating each required NSCW cooling tower fan for  $\geq 15$  minutes ensures that all required fans are OPERABLE and that all associated controls are functioning properly.

(continued)

BASES

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SURVEILLANCE  
REQUIREMENTS

SR 3.7.9.3 (continued)

~~controls are functioning properly.~~ It also ensures that fan or motor failure, or excessive vibration, can be detected for corrective action. The 31 day Frequency is based on operating experience, the known reliability of the fan units, the redundancy available, and the low probability of significant degradation of the UHS cooling tower fans occurring between surveillances.

SR 3.7.9.4

The verification of NSCW basin transfer pump operation includes testing to verify the pump's developed head at the flow test point is greater than or equal to the required developed head. Flow and differential head are normal tests of centrifugal pump performance required by Section XI of the ASME Code (Ref. 3). This test confirms one point on the pumps design curve and is indicative of overall performance. Such inservice tests confirm component OPERABILITY, trend performance, and detect incipient failures by indicating abnormal performance. The performance of this surveillance in accordance with the Inservice Testing Program satisfies the requirements of Ref. 3.

SR 3.7.9.5

With one tower fan out-of-service this SR verifies that ambient wet-bulb temperature remains < 63°F so that the NSCW system remains capable of performing its design basis function. Requiring this SR when forecasted temperature is > 48°F provides assurance that the ambient wet-bulb temperature of 63 °F will not be exceeded while the fan is out-of-service. The 24-hour frequency is sufficient since the daily peak temperature is expected to occur once in a 24-hour interval. Measurement of the ambient wet-bulb temperature should be made near the time when the daily peak temperature is expected to occur with a psychrometer in an open area, away from sources of moisture, heat or wind, and within the owner-controlled area at Plant Vogtle.

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REFERENCES

1. FSAR, Subsection 9.2.5.
  2. Regulatory Guide 1.27.
  3. ASME, Boiler and Pressure Vessel Code, Section XI.
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**Enclosure 4**

**Vogtle Electric Generating Plant  
Request to Revise Technical Specifications – Ultimate Heat Sink**

**Clean-typed Technical Specification and Bases Pages**

**Affected Pages**

**3.7.9-1**

**3.7.9-3**

**B 3.7.9-2**

**B3.7.9-4**

**B3.7.9-5**

3.7 PLANT SYSTEMS

3.7.9 Ultimate Heat Sink (UHS)

LCO 3.7.9 The UHS shall be OPERABLE. With ambient wet-bulb temperature > 63°F, four fans and four spray cells per train shall be OPERABLE. With ambient wet-bulb temperature ≤ 63°F, three fans and four spray cells per train shall be OPERABLE.

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

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more Nuclear Service Cooling Water (NSCW) basins with water temperature and/or water level not within limits.	A.1 Restore water temperature(s) and water level(s) to within limits.	72 hours
B. One NSCW cooling tower with one or more required fans and/or spray cells inoperable.	B.1 Restore fan(s) and spray cell(s) to OPERABLE status.	72 hours

(continued)

**SURVEILLANCE REQUIREMENTS**

SURVEILLANCE		FREQUENCY
SR 3.7.9.1	Verify water level of NSCW basin is $\geq 80.25$ ft.	24 hours
SR 3.7.9.2	Verify water temperature of NSCW basin is $\leq 90^{\circ}\text{F}$ .	24 hours
SR 3.7.9.3	Operate each required NSCW cooling tower fan for $\geq 15$ minutes.	31 days
SR 3.7.9.4	Verify NSCW basin transfer pump operation.	In accordance with the Inservice Testing Program
SR 3.7.9.5	Verify ambient wet-bulb temperature $\leq 63^{\circ}\text{F}$ when one NSCW tower fan is out-of-service and daily high temperature (dry-bulb) is forecasted to be $> 48^{\circ}\text{F}$ .	24 hours

**BASES**

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**APPLICABLE  
SAFETY ANALYSES  
(continued)**

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 NSCW 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 NSCW.

In order to meet these requirements, two NSCW tower basins are required OPERABLE with the following:

1. Basin water level must be  $\geq 80.25$  feet as measured from the bottom of the basin (73% of instrument span),
  2. Basin water temperature must be  $\leq 90^{\circ}\text{F}$ ,
  3. Two OPERABLE trains of NSCW tower fans, each train consisting of four fans and four spray cells when ambient wet-bulb temperature  $> 63^{\circ}\text{F}$  or three fans and four spray cells (sprays and natural draft through the nonoperating fan) when ambient wet-bulb temperature  $\leq 63^{\circ}\text{F}$ , and
  4. Two OPERABLE NSCW basin transfer pumps.
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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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**BASES**

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**ACTIONS**  
(continued)

D.1 and D.2

If the Required Actions of Conditions A, B, or C are not completed within their associated Completion Times or if the UHS is inoperable for reasons other than described in Conditions A, B, or C, 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 in 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.

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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 NSCW System 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  $\geq 80.25$  feet (plant elevation of 217 feet-3 inches or 73% of instrument span on LI-1606 and LI-1607).

SR 3.7.9.2

This SR verifies that the NSCW System 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 water temperature of the UHS is  $\leq 90^{\circ}\text{F}$  (TJI-1690 and TJI-1691).

SR 3.7.9.3

Operating each required NSCW cooling tower fan for  $\geq 15$  minutes ensures that all required fans are OPERABLE and that all associated controls are functioning properly.

(continued)



**BASES**

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**SURVEILLANCE  
REQUIREMENTS**

SR 3.7.9.3 (continued)

It also ensures that fan or motor failure, or excessive vibration, can be detected for corrective action. The 31 day Frequency is based on operating experience, the known reliability of the fan units, the redundancy available, and the low probability of significant degradation of the UHS cooling tower fans occurring between surveillances.

SR 3.7.9.4

The verification of NSCW basin transfer pump operation includes testing to verify the pump's developed head at the flow test point is greater than or equal to the required developed head. Flow and differential head are normal tests of centrifugal pump performance required by Section XI of the ASME Code (Ref. 3). This test confirms one point on the pumps design curve and is indicative of overall performance. Such inservice tests confirm component OPERABILITY, trend performance, and detect incipient failures by indicating abnormal performance. The performance of this surveillance in accordance with the Inservice Testing Program satisfies the requirements of Ref. 3.

SR 3.7.9.5

With one tower fan out-of-service this SR verifies that ambient wet-bulb temperature remains  $\leq 63^{\circ}\text{F}$  so that the NSCW system remains capable of performing its design basis function. Requiring this SR when forecasted temperature is  $> 48^{\circ}\text{F}$  provides assurance that the ambient wet-bulb temperature of  $63^{\circ}\text{F}$  will not be exceeded while the fan is out-of-service. The 24-hour frequency is sufficient since the daily peak temperature is expected to occur once in a 24-hour interval. Measurement of the ambient wet-bulb temperature should be made near the time when the daily peak temperature is expected to occur with a psychrometer in an open area, away from sources of moisture, heat or wind, and within the owner-controlled area at Plant Vogtle.

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**REFERENCES**

1. FSAR, Subsection 9.2.5.
  2. Regulatory Guide 1.27.
  3. ASME, Boiler and Pressure Vessel Code, Section XI.
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