3/4.7.5 ULTIMATE HEAT SINK

LIMITING CONDITION FOR OPERATION

3.7.5 The ultimate heat sink (UHS) shall be OPERABLE with:

a. A service water pumphouse water level at or above 5'-0", minus 36'-0" Mean Sea Level, USGS datum, and

b. A mechanical draft cooling tower comprised of one cooling tower cell with one OPERABLE** fan and a second cell with two OPERABLE** fans, and a contained basin water level of equal to or greater than 42.15* feet at a bulk average water temperature of less than or equal to ~~67.3°F~~ 70, and

c. A portable tower makeup pump system stored to be OPERABLE for 30 days following a Safe Shutdown Earthquake.

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

ACTION:

a. With the service water pumphouse inoperable, restore the service water pumphouse 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.

b. With the mechanical draft cooling tower inoperable, restore the cooling tower 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.

c. With the portable tower makeup pump system not stored to be OPERABLE, restore the portable tower makeup pump system to its required stored condition within 72 hours, or declare the portable tower makeup pump system inoperable.

d. With the portable tower makeup pump system inoperable, continue operation and notify the NRC within 1 hour in accordance with the procedure of 10 CFR 50.72 of actions or contingencies to ensure an adequate supply of makeup water to the mechanical draft cooling tower for a minimum of 30 days.

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*With the cooling tower in operation with valves aligned for tunnel heat treatment, the tower basin level shall be maintained at greater than or equal to 40.55 feet.

** A fan may be considered OPERABLE if it is capable of being manually started from the main control board.

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ULTIMATE HEAT SINK

SURVEILLANCE REQUIREMENTS

4.7.5 The ultimate heat sink shall be determined OPERABLE:

a. At least once per 24 hours by:

1) Verifying the water level in the service water pumphouse to be at or above 5'-0", minus 36'-0" Mean Sea Level, and

2) Verifying the water in the mechanical draft cooling tower basin to be greater than or equal to a level of 42.15 feet.

b. At least once per week by verifying that the water in the mechanical draft cooling tower basin to be at a bulk average temperature of less than or equal to ~~67~~ 70°F.

c. At least once per 31 days by:

1) Starting from the control room each UHS cooling tower fan that is required to be OPERABLE and operating each of those fans for at least 15 minutes, and

2) Verifying that the portable tower makeup pump system is stored in its design operational readiness state.

d. ~~At least once per 18 months by:~~ that each automatic valve in the flowpath actuates to its correct position,

~~1) Verifying automatic actuation of each cooling tower fan~~ on a Tower Actuation test signal, and

2) Verifying the portable tower makeup pump develops a flow greater than or equal to 200 gpm on recirculation test flow.

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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_{NDT} of 60°F and are sufficient to prevent brittle fracture.

3/4.7.3 PRIMARY COMPONENT COOLING WATER SYSTEM

The OPERABILITY of the Primary 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 SERVICE WATER SYSTEM

The Service Water System consists of two independent loops, each of which can operate with either a service water pump train or a cooling tower pump train. The OPERABILITY of the 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 safety analyses, which also assumes loss of either the cooling tower or ocean cooling.

3/4.7.5 ULTIMATE HEAT SINK

The limitations on service water pumphouse level, and the OPERABILITY requirements for the mechanical draft cooling tower and the portable tower makeup pump system, ensure that sufficient cooling capacity is available to either: (1) provide normal cooldown of the facility or (2) mitigate the effects of accident conditions within acceptable limits. This cooling capability is provided by the Atlantic Ocean except during loss of ocean tunnel water flow, when the cooling capability is provided by the mechanical draft cooling tower with tower makeup using portable pumps.

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

3/4.7.6 CONTROL ROOM EMERGENCY MAKEUP AIR AND FILTRATION SUBSYSTEM

The OPERABILITY of the Control Room Emergency Makeup Air and Filtration Subsystem ensures that: (1) the allowable temperature for continuous-duty rating for the equipment and instrumentation cooled by this system is not exceeded; and (2) the control room will remain habitable for operations

INSERT A

The Cooling Tower is normally aligned to allow return flow to initially bypass the tower sprays and return to the basin. In addition, the control switches for the cooling tower fans are normally maintained in the "pull-to-lock" position. Upon receipt of a Tower Actuation Signal, the fans and sprays are manually operated as required. This manual operation, which is governed by procedures, ensures that ice does not buildup on the cooling tower tile fill and fans. Manual action is sufficient to maintain the cooling tower basin at a temperature which precludes equipment damage during the postulated design basis event.

III. **Retype of Proposed Changes**

See attached retype of proposed changes to Technical Specifications. The attached retype reflects the currently issued version of the Technical Specifications. Pending Technical Specification changes or Technical Specification changes issued subsequent to this submittal are not reflected in the enclosed retype. The enclosed retype should be checked for continuity with the current Technical Specifications prior to issuance.

Revision bars are provided in the right hand margin to designate a change in the text. No revision bars are utilized when the page is changed solely to accommodate the shifting of text due to additions or deletions.

3/4.7.5 ULTIMATE HEAT SINK

LIMITING CONDITION FOR OPERATION

3.7.5 The ultimate heat sink (UHS) shall be OPERABLE with:

a. A service water pumphouse water level at or above 5'-0", minus 36'-0" Mean Sea Level, USGS datum, and

b. A mechanical draft cooling tower comprised of one cooling tower cell with one OPERABLE** fan and a second cell with two OPERABLE** fans, and a contained basin water level of equal to or greater than 42.15* feet at a bulk average water temperature of less than or equal to 70°F, and

c. A portable tower makeup pump system stored to be OPERABLE for 30 days following a Safe Shutdown Earthquake.

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

ACTION:

a. With the service water pumphouse inoperable, restore the service water pumphouse 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.

b. With the mechanical draft cooling tower inoperable, restore the cooling tower 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.

c. With the portable tower makeup pump system not stored to be OPERABLE, restore the portable tower makeup pump system to its required stored condition within 72 hours, or declare the portable tower makeup pump system inoperable.

d. With the portable tower makeup pump system inoperable, continue operation and notify the NRC within 1 hour in accordance with the procedure of 10 CFR 50.72 of actions or contingencies to ensure an adequate supply of makeup water to the mechanical draft cooling tower for a minimum of 30 days.

*With the cooling tower in operation with valves aligned for tunnel heat treatment, the tower basin level shall be maintained at greater than or equal to 40.55 feet.

**A fan may be considered OPERABLE if it is capable of being manually started from the main control board.

SURVEILLANCE REQUIREMENTS

4.7.5 The ultimate heat sink shall be determined OPERABLE:

a. At least once per 24 hours by:

1) Verifying the water level in the service water pumphouse to be at or above 5'-0", minus 36'-0" Mean Sea Level, and

2) Verifying the water in the mechanical draft cooling tower basin to be greater than or equal to a level of 42.15 feet.

b. At least once per week by verifying that the water in the mechanical draft cooling tower basin to be at a bulk average temperature of less than or equal to 70°F.

c. At least once per 31 days by:

1) Starting from the control room each UHS cooling tower fan that is required to be OPERABLE and operating each of those fans for at least 15 minutes, and

2) Verifying that the portable tower makeup pump system is stored in its design operational readiness state.

d. At least once per 18 months by:

1) Verifying that each automatic valve in the flow path actuates to its correct position on a Tower Actuation test signal, and

2) Verifying the portable tower makeup pump develops a flow greater than or equal to 200 gpm on recirculation test flow.

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_{NDT} of 60°F and are sufficient to prevent brittle fracture.

3/4.7.3 PRIMARY COMPONENT COOLING WATER SYSTEM

The OPERABILITY of the Primary 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 SERVICE WATER SYSTEM

The Service Water System consists of two independent loops, each of which can operate with either a service water pump train or a cooling tower pump train. The OPERABILITY of the 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 safety analyses, which also assumes loss of either the cooling tower or ocean cooling.

3/4.7.5 ULTIMATE HEAT SINK

The limitations on service water pumphouse level, and the OPERABILITY requirements for the mechanical draft cooling tower and the portable tower makeup pump system, ensure that sufficient cooling capacity is available to either: (1) provide normal cooldown of the facility or (2) mitigate the effects of accident conditions within acceptable limits. This cooling capability is provided by the Atlantic Ocean except during loss of ocean tunnel water flow, when the cooling capability is provided by the mechanical draft cooling tower with tower makeup using portable pumps.

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

The cooling tower is normally aligned to allow return flow to initially bypass the tower sprays and return to the basin. In addition, the control switches for the cooling tower fans are normally maintained in the "pull-to-lock" position. Upon receipt of a Tower Actuation Signal, the fans and sprays are manually operated as required. This manual operation, which is governed by procedures, ensures that ice does not buildup on the cooling tower tile fill and fans. Manual action is sufficient to maintain the cooling tower basin at a temperature which precludes equipment damage during the postulated design basis event.

3/4.7.6 CONTROL ROOM EMERGENCY MAKEUP AIR AND FILTRATION SUBSYSTEM

The OPERABILITY of the Control Room Emergency Makeup Air and Filtration Subsystem ensures that: (1) the allowable temperature for continuous-duty rating for the equipment and instrumentation cooled by this system is not exceeded; and (2) the control room will remain habitable for operations personnel during and following credible accident conditions. Cumulative operation of the system with the heaters on for 10 hours over a 31-day period is sufficient to reduce the buildup of moisture on the adsorbers and HEPA filters. Heaters run continuously to maintain the relative humidity below 70%. The OPERABILITY of this system in conjunction with control room design provisions is based on limiting the radiation exposure to personnel occupying the control room to 5 rems or less whole body, or its equivalent. This limitation is consistent with the requirements of General Design Criterion 19 of Appendix A, 10 CFR Part 50. ANSI N510-1980 will be used as a procedural guide for surveillance testing.

3/4.7.7 SNUBBERS

All snubbers are required OPERABLE to ensure that the structural integrity of the Reactor Coolant System and all other safety-related systems is maintained during and following a seismic or other event initiating dynamic loads.

Snubbers are classified and grouped by design and manufacturer but not by size. For example, mechanical snubbers utilizing the same design features of the 2-kip, 10-kip and 100-kip capacity manufactured by Company "A" are of the same type. The same design mechanical snubbers manufactured by Company "B" for the purposes of this Technical Specification would be of a different type, as would hydraulic snubbers from either manufacturer.

A list of individual snubbers with detailed information of snubber location and size and of system affected shall be available at the plant in accordance with Section 50.71(c) of 10 CFR Part 50. The accessibility of each snubber shall be determined and approved by the Station Operation Review Committee (SORC). The determination shall be based upon the existing radiation levels and the expected time to perform a visual inspection in each snubber location as well as other factors associated with accessibility during plant operations (e.g., temperature, atmosphere, location, etc.), and the recommendations of Regulatory Guides 8.8 and 8.10. The addition or deletion of any hydraulic or mechanical snubber shall be made in accordance with Section 50.59 of 10 CFR Part 50.

Surveillance to demonstrate OPERABILITY is by performance of the requirements of an approved inservice inspection program.

Permanent or other exemptions from the surveillance program for individual snubbers may be granted by the Commission if a justifiable basis for exemption is presented and, if applicable, snubber life destructive testing was performed to qualify the snubbers for the applicable design conditions at either the completion of their fabrication or at a subsequent date. Snubbers so exempted shall be listed in the list of individual snubbers indicating the extent of the exemptions.

3/4.7.7 SNUBBERS (Continued)

The service life of a snubber is established via manufacturer input and information through consideration of the snubber service conditions and associated installation and maintenance records (newly installed snubbers, seal replaced, spring replaced, in high radiation area, in high temperature area, etc.). The requirement to monitor the snubber service life is included to ensure that the snubbers periodically undergo a performance evaluation in view of their age and operating conditions. These records will provide statistical bases for future consideration of snubber service life.

3/4.7.8 SEALED SOURCE CONTAMINATION

The limitations on removable contamination for sources requiring leak testing, including alpha emitters, is based on 10 CFR 70.39(a)(3) limits for plutonium. This limitation will ensure that leakage from Byproduct, Source, and Special Nuclear Material sources will not exceed allowable intake valucs.

Sealed sources are classified into three groups according to their use, with Surveillance Requirements commensurate with the probability of damage to a source in that group. Those sources which are frequently handled are required to be tested more often than those which are not. Sealed sources which are continuously enclosed within a shielded mechanism (i.e., sealed sources within radiation monitoring or boron measuring devices) are considered to be stored and need not be tested unless they are removed from the shielded mechanism.

3/4.7.9 (This specification number is not used.)

3/4.7.10 AREA TEMPERATURE MONITORING

The area temperature limitations ensure that safety-related equipment will not be subjected to temperatures in excess of their environmental qualification temperatures. Exposure to excessive temperatures may degrade equipment and can cause a loss of its OPERABILITY. The temperature limits include an allowance for instrument error of ± 4.5°F.

IV. Safety Evaluation of License Amendment Request 92-13 Proposed Changes

The cooling tower functions as the backup ultimate heat sink, and is capable of cooling the service water system heat loads following a seismic event that results in the collapse and greater than 95% blockage of the circulating water system tunnels. The design basis for the cooling tower assumes that the seismic event which results in the collapse of the ocean tunnels also initiates a Loss of Coolant Accident (LOCA) and a Loss of Offsite Power (LOP). The design basis heat load for the tower therefore consists of the residual heat removal (RHR) system heat rejection, containment building spray (CBS) system heat rejection, diesel generator cooling system heat rejection, the cooling tower pumps, and other small loads imposed on the primary component cooling water (PCCW) system during the accident.

During the initial stage of the LOCA the Emergency Core Cooling System (ECCS) operates in the injection phase. In this phase, the water supply for the ECCS pumps is the Refueling Water Storage Tank (RWST) and the heat loads imposed on the cooling tower by the ECCS equipment is minimal. The majority of the heat load on the cooling tower occurs following switchover from the ECCS injection phase to the recirculation phase. During the recirculation phase, valves are aligned to draw water from the containment recirculation sump to be re-injected into the reactor vessel and containment building. This water, which had previously been cool water from the RWST, now must be cooled in the RHR and CBS heat exchangers, prior to re-injection. This heat is ultimately rejected to the cooling tower and when this occurs, a significant heat load is imposed on the cooling tower.

The bulk temperature of the cooling tower basin water is currently limited to an initial temperature of 67.3°F by Technical Specification 3.7.5. This limit was chosen to ensure that the cooling tower basin temperature would be limited during the design basis event to ensure that the design limitations of the primary component water cooling system are not exceeded. An analysis has been performed by, North Atlantic Energy Service Corporation (North Atlantic), which demonstrates that the cooling tower basin average temperature could be allowed to increase to 80°F during a single train post-LOCA cooldown, or to 87°F during a two train cooldown, prior to initiating sprays and fans without exceeding equipment limitations. North Atlantic has proposed, on the basis of this analysis, that the cooling tower Technical Specification basin temperature limit be increased to 70°F. The analysis which demonstrates this is available for NRC review at Seabrook Station. This proposed change will alleviate a significant operational burden by minimizing the potential for requiring cooling tower operation, with spray, to reduce basin temperature below the current Technical Specification value (67.3°F), during the summer months. The proposed increase in basin temperature will maintain an adequate amount of time for operator action to initiate spray and fan operation and will not adversely affect the ability to remove the LOCA heat load.

If the cooling tower is manually operated, assuming maximum ECCS flows and the minimum allowable RWST level, i.e. minimizing the time to recirculation, and with the increased basin temperature, a minimum of 74 minutes will be available for operator action to initiate cooling tower sprays and fans prior to reaching either basin limiting temperature. This time is greater than the 20 minute minimum operator response time specified in NUREG 0800. NUREG 0800 Section 6.3 states in part that where manual action is used, a sufficient time (greater than 20 minutes) be available for the operator to respond. Manual operation of the cooling tower will continue to allow the cooling tower to meet its design requirements and

will enhance the safe operation of Seabrook Station by ensuring that the cooling tower is operated in an ice free condition.

Although the post-LOCA cooldown is the design basis case for the cooling tower, a normal cooldown has also been evaluated with respect to the increased basin initial temperature and manual cooling tower spray and fan operation. The normal cooldown differs from the post-LOCA cooldown in that the initial heat load to the cooling tower is higher in the normal cooldown case. This higher load is associated with the normal plant heat loads. These normal plant heat loads would be isolated in the post-LOCA cooldown case.

As in the post-LOCA cooldown case, the cooling tower basin is assumed to be at its maximum initial temperature and minimum volume. The tower basin temperature is again limited to a maximum temperature of 80°F prior to initiating cooling tower spray and fan operation. This 80°F limit is conservative for this case as it is based on the larger heat loads experienced in the post-LOCA cooldown case. With the maximum normal cooldown heat load, and assuming a loss of offsite power which adds the heat rejection from both diesel generators, greater than 106 minutes is available for operator action to start the cooling tower sprays and fans prior to reaching a cooling tower basin average temperature of 80°F.

There is adequate procedural guidance, operator training, and main control room indication available, to alert the operator to the need to initiate cooling tower fan and spray operation. During the postulated design basis scenario, operators are directed to monitor cooling tower performance at step 10 of Seabrook Station emergency operating procedure E-0, "Reactor Trip or Safety Injection". This step directs the operator to verify ultimate heat sink operation. If the cooling tower is the ultimate heat sink the operator is directed to initiate cooling tower spray and/or fan operation based on the combination of wet bulb temperature and PCCW heat exchanger outlet temperature. If the criteria to initiate cooling tower spray and fan operation has not been reached when step 10 of emergency operating procedure E-0 is reached, operators will periodically monitor cooling tower operation to ascertain the need for spray and fan operation. In addition, there are PCCW high temperature alarms on the main control board, which will alert operators to the need to initiate cooling tower spray and fan operation.

If a Tower Actuation were to occur without an accompanying entry into the Emergency Operating Procedures; Abnormal Procedure OS1216.01, "Degraded Ultimate Heat Sink" provides guidance on cooling tower fan and spray operation.

Operator training is conducted using abnormal and emergency simulator scenarios. Several of these scenarios emphasize monitoring ultimate heat sink performance. These training scenarios verify that appropriate operator action is taken during a cooling tower actuation occurring with and without entry into emergency operating procedure E-0, "Reactor Trip or Safety Injection".

The cooling tower spray bypass valves, 1-SW-V139 and 1-SW-V140, are included in the Inservice Test program and are periodically surveilled pursuant to Technical Specification Surveillance Requirement 4.0.5. This requirement demonstrates that the valves will operate as required by performing valve stroke times and remote position indication verification.

Based upon the above, there is sufficient time and procedural guidance available to manually initiate cooling tower spray and fan operation following the cooling tower design basis event. In addition, operators are periodically trained to initiate appropriate action regarding manual cooling tower operation. There is also alarm indication available in the main control room, to alert and direct operators to initiate cooling tower fan and spray operation. Therefore, operation of the cooling tower with the sprays and fans manually controlled and with an increased cooling tower basin Technical Specification temperature limit, does not require immediate operator action to mitigate the effects of an accident, and therefore the proposed Technical Specification change does not create a safety concern.

In conclusion, the proposed changes will allow cooling tower spray and fan operation to be manually initiated by the operator as opposed to automatically occurring during a cooling tower actuation and will reduce the times that the cooling tower must be operated to reduce basin temperature. This change is necessary to prevent icing of the cooling tower during cooling tower operation when ambient temperature is below freezing and will enhance the safe operation of the plant. The surveillance requirements will continue to verify that the cooling tower is OPERABLE and capable of performing its design function as the alternate Ultimate Heat Sink. As discussed above, sufficient time is available for the operators to manually initiate cooling tower spray and fan operation even with the increased basin temperature. Therefore, there is no significant increase in the safety consequences associated with the requested amendment.

V. Determination of Significant Hazards for License Amendment Request 92-13 Proposed Changes

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

Verification of the proper actuation of the automatic valves in the flowpath is currently performed during cooling tower surveillance testing; the addition of a Technical Specification surveillance requirement to perform this verification has no affect on the operation of the plant. This change affects only the operating mode for the cooling tower fans and the initial basin temperature. Chapter 9, Section 9.2.5.2 of the Updated Final Safety Analysis Report (UFSAR) recognizes the manual operating mode of the cooling tower fans and sprays by stating that greater than 30 minutes is available, following the design basis event, in which to initiate fan and/or spray operation. It has been determined by North Atlantic that at least 74 minutes will be available to the operators in which to take manual action and initiate cooling tower fan and spray operation. This time includes the consideration of the increase in the initial cooling tower basin temperature. This is an acceptable amount of time in which to initiate manual action and is greater than the 20 minute minimum specified in NUREG 0800. Therefore, the probability of an accident previously evaluated in the UFSAR is not significantly increased by the proposed revision.

The cooling tower is automatically aligned as the ultimate heat sink following a seismic event which results in the blockage of the circulating water tunnels and subsequent loss of Service Water (SW) system pressure. Manual control of the cooling tower, while retaining the automatic switchover to the tower, will not adversely affect the ability of the cooling tower to function in this capacity. As discussed above, with the increased initial basin temperature, sufficient time exists for the manual initiation of cooling tower sprays and fans following the seismically induced Loss Of Coolant Accident (LOCA). Additionally, there is adequate procedural guidance, operator training and alarm indications to alert and direct operators to initiate cooling tower fan and spray operation.

With the ultimate heat sink available, all safety systems will function as designed. This change will therefore have no adverse affect on the doses to members of the public from any previously analyzed accident and therefore the consequences of an accident previously evaluated in the UFSAR is not significantly increased by the proposed revision.

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

The proposed change modifies the cooling tower operating mode from automatic actuation to manual actuation. This not a new mode of operation; this mode of operation is presently acknowledged and described in UFSAR Chapter 9. Manual control of the cooling tower will not adversely affect the availability of the cooling tower or its heat removal capability. The cooling tower spray bypass valves, 1-SW-V139 and 1-SW-V140, are included in the Inservice Test program and are periodically surveilled pursuant to Technical Specification Surveillance Requirement 4.0.5. This requirement demonstrates that the valves will operate as required by performing valve stroke times and remote position indication verification. No credible

failure mechanism is created by manual control of the cooling tower which could result in the initiation of an accident. The 70°F initial basin temperature allows sufficient time for operator action to initiate cooling tower fan and spray operation in accordance with procedures. Therefore, the possibility of a new or different kind of accident from any accident previously evaluated in the UFSAR is not created.

3. The proposed changes do not result in a significant reduction in the margin of safety.

The Bases for Technical Specification 3/4.7.5 state that the OPERABILITY of the cooling tower ensures that sufficient cooling capability is available to provide normal cooldown of the facility or to mitigate the affects of accident conditions within acceptable limits. The proposed change modifies the operation of the cooling tower sprays and fans from automatic to manual initiation. Manual operation of the cooling tower sprays and fans will not adversely affect cooling tower operation or its heat removal capability and the cooling tower will still be verified to be OPERABLE. An OPERABLE Cooling Tower ensures that the assumptions in the Bases of Technical Specifications are not affected and ensures that the margin of safety is not reduced.

The design basis event for the cooling tower is a seismic event which collapses the circulating water system tunnels. The design basis assumes that the seismic event which collapsed the tunnels, also caused a Loss of Coolant Accident and Loss of Offsite Power. In this limiting scenario, greater than 74 minutes are available to initiate cooling tower sprays and fans following the seismic event. Adequate procedural guidance, operator training, and alarm indications are provided to facilitate operation of the fans and sprays. Following this manual action, the full capability of the cooling tower ultimate heat sink is available to meet the requirements of the design basis event. The 70°F initial basin temperature allows sufficient time for operator action to manually initiate cooling tower fans and sprays in accordance with procedures.

Therefore, the assumptions in the Bases of Technical Specifications are not affected and this change will not result in a significant reduction in the margin of safety.

VI. Proposed Schedule for License Amendment Issuance and Effectiveness

North Atlantic requests NRC review of License Amendment Request 92-13 and issuance of a license amendment having immediate effectiveness by March 31, 1993 or as soon as possible.

The Technical Specification changes proposed herein will enhance the safe operation of the plant by precluding the possibility of damage to the cooling tower or fans due to ice buildup.

VII. Environmental Impact Assessment

North Atlantic has reviewed the proposed license amendment against the criteria of 10CFR51.22 for environmental considerations. The proposed changes do not involve a significant hazards consideration, nor increase the types and amounts of effluent that may be released offsite, nor significantly increase individual or cumulative occupational radiation exposures. Based on the foregoing, North Atlantic concludes that the proposed change meets the criteria delineated in 10CFR51.22(c)(9) for a categorical exclusion from the requirements for an Environmental Impact Statement.

VIII. Other Supporting Documentation

Figure 1, Service Water System

Figure 2, Cooling Tower Fan and Spray Operation

Figure 1
Service Water System

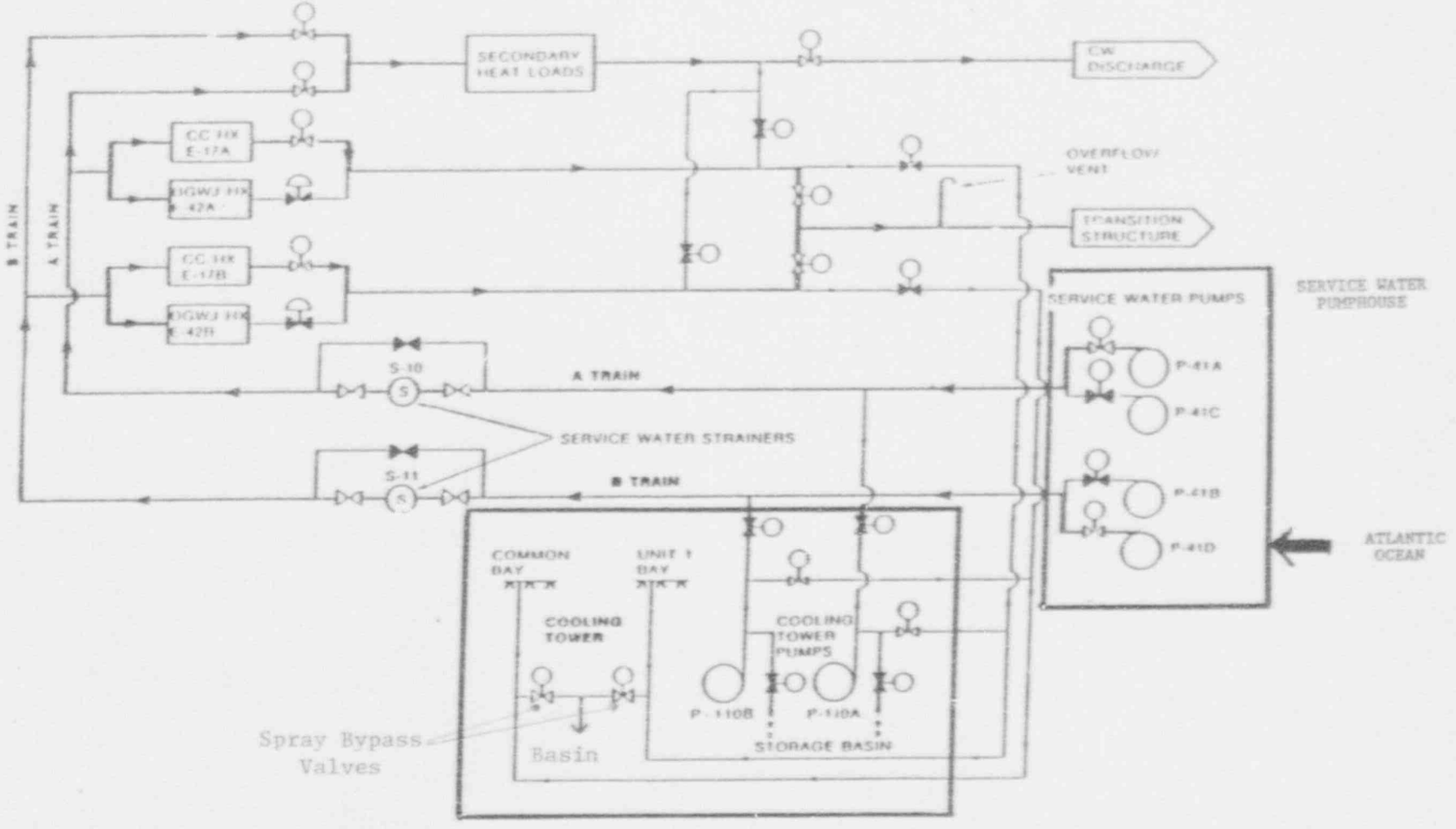
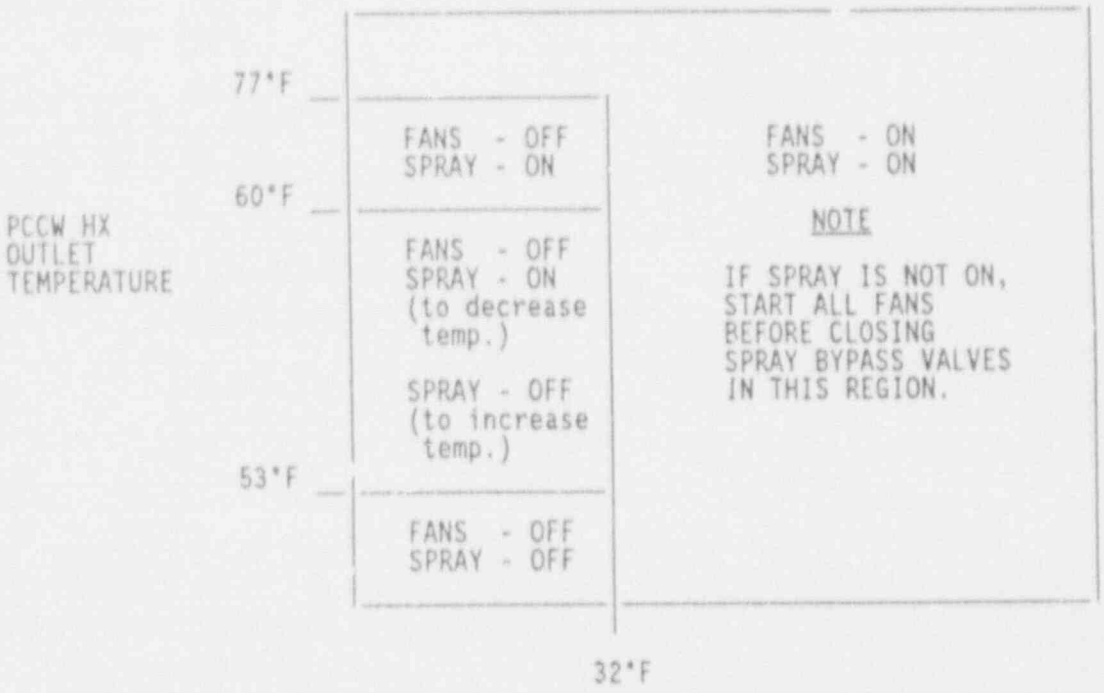


Figure 2
Fan and Spray Operation

Number	Title	Rev./Date
OS1216.01	DEGRADED ULTIMATE HEAT SINK	03 08-07-91

ATTACHMENT C

COOLING TOWER FAN AND SPRAY OPERATION



C-0789 - Wet Bulb 15 Minute Average

A PCCW HX OUTLET TEMPERATURE - SW-TI-6105 or A1534

B PCCW HX OUTLET TEMPERATURE - SW-TI-6115 or A1536