Enclosure 1 to NYN-89046

Proposed Technical Specification Changes

PLANT SYSTEMS

3/4.7.6 CONTROL ROOM EMERGENCY ~~AIR CLEANUP SYSTEM~~ MAKEUP AIR AND FILTRATION SUBSYSTEM

LIMITING CONDITION FOR OPERATION

3.7.6 Two independent Control Room Emergency ~~Air Cleanup Systems~~ Makeup Air and Filtration Subsystems shall be OPERABLE.

APPLICABILITY: All MODES.

ACTION:

MODES 1, 2, 3 and 4:

With one Control Room Emergency ~~Air Cleanup System~~ Makeup Air and Filtration Subsystem inoperable, restore the inoperable system to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

MODES 5 and 6:

a. With one Control Room Emergency ~~Air Cleanup System~~ Makeup Air and Filtration Subsystem inoperable, restore the inoperable system to OPERABLE status within 7 days or initiate and maintain operation of the remaining OPERABLE Control Room Emergency ~~Air Cleanup System~~ in the ~~recirculation~~ filtration/recirculation mode.

b. With both Control Room Emergency ~~Air Cleanup Systems~~ Makeup Air and Filtration Subsystems inoperable, or with the OPERABLE Control Room Emergency ~~Air Cleanup System~~ Makeup Air and Filtration Subsystem required to be in the ~~recirculation~~ filtration/recirculation mode by ACTION a., not capable of being powered by an OPERABLE emergency power source, suspend all operations involving CORE ALTERATIONS or positive reactivity changes.

SURVEILLANCE REQUIREMENTS

4.7.6 Each Control Room Emergency ~~Air Cleanup System~~ Makeup Air and Filtration Subsystem shall be demonstrated OPERABLE:

INSERT A

~~a. At least once per 12 hours by verifying that the control room air temperature is less than or equal to [80]°F;~~

b. At least once per 31 days on a STAGGERED TEST BASIS by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the system operates for at least 10 continuous hours with the heaters operating;

c. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system by:

1) Verifying that the ~~cleanup~~ filtration system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than ~~[*]~~ .05% and uses the test procedure guidance in Regulatory Position C.5.a, C.5.c, and C.5.d of Regulatory Guide 1.52, Revision~~s~~ 2, March 1978*, and the system flow rate is 1100 cfm ± 10%;

2) Verifying, within 31 days after removal, that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978*, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978*, for a methyl iodide penetration of less than ~~[**]~~ 1.0%; and

3) Verifying a system flow rate of 1100 cfm ± 10% during system operation when tested in accordance with ANSI N510-~~1975~~1980.

d. After every 720 hours of charcoal adsorber operation, by verifying, within 31 days after removal, that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978*, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978*, for a methyl iodide penetration of less than ~~[**]~~ 1.0%;

e. At least once per 18 months by:

INSERT B

~~1) Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than [6] inches Water Gauge while operating the system at a flow rate of ___ cfm ± 10%;~~

~~2) Verifying that on a Containment Phase "A" Isolation and High Smoke Density test signal, the system automatically switches into a recirculation mode of operation with flow through the HEPA filters and charcoal adsorber banks;~~

4 ~~3~~) Verifying that the ~~system~~ Control Room Emergency Makeup Air and Filtration Subsystem maintains the control room at a positive pressure of greater than or equal to [1/8] inch Water Gauge at less than or equal to a pressurization flow of 600 cfm relative to adjacent areas during system operation; and

5 ~~4~~) Verifying that the heaters dissipate 3.6 ± 0.36 kW when tested in accordance with ANSI N510-1975; and

~~5) Verifying that on a High Chlorine/Toxic Gas test signal, the system automatically switches into a recirculation mode of operation with flow through the HEPA filters and charcoal adsorber banks within [15] seconds.~~

INSERT C

SURVEILLANCE REQUIREMENTS (Continued)

f. After each complete or partial replacement of a HEPA filter bank, by verifying that the ~~cleanup~~ filtration system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than ~~[*]~~ .05% in accordance with ANSI N510-~~1975~~ 1980 for a DOP test aerosol while operating the system at a flow rate of 1100 cfm ± 10%; and

g. After each complete or partial replacement of a charcoal adsorber bank, by verifying that the ~~cleanup~~ filtration system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than .05% ~~[*]~~ in accordance with ANSI N510-~~1975~~ 1980 for a halogenated hydrocarbon refrigerant test gas while operating the system at a flow rate of 1100 cfm ± 10%.

*0.05% value applicable when a HEPA filter or charcoal adsorber efficiency of 99% is assumed, or 1% when a HEPA filter or charcoal adsorber efficiency of 95% or less is assumed in the NRC staff's safety evaluation. (Use the value assumed for the charcoal adsorber efficiency if the value for the HEPA filter is different from the charcoal adsorber efficiency in the NRC staff's safety evaluation.)

**Value applicable will be determined by the following equation:

$P = \frac{100\%-E}{SF}$, when P equals the value to be used in the test requirement (%), E is efficiency assumed in the SER for methyl iodide removal (%), and SF is the safety factor to account for charcoal degradation between tests (5 for systems with heaters and 7 for systems without heaters).

INSERTS FOR TECHNICAL SPECIFICATION 3/4.7.6

A:

a. At least once per 12 hours by verifying that the Control Room is maintained below the limiting equipment qualification temperature in the Control Room area.

B:

1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks, for filter CBA-F-38, is less than 2.8 inches Water Gauge while operating the system at a flow rate of 1100 cfm ± 10%: and verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks, for filter CBA-F-8038, is less than 6.3 inches Water Guage while operating the system at a flow rate of 1100 cfm ± 10%.

2. Verifying that upon generation of an 'S' test signal, the following automatic system functions occur:

   a. The normal makeup air fan(s) trip off and the normal makeup air isolation damper(s) close;

   b. The control room exhaust subsystem isolation damper(s) close, and the exhaust fan trips off;

   c. The control room emergency makeup air and filtration subsystem actuates with flows through the HEPA filters and charcoal adsorber banks;

3. Verifying that upon generation of Remote Intake High Radiation test signal, the following automatic system functions occur:

   a. The normal makeup air fan(s) trip off and the normal makeup air isolation damper(s) close;

   b. The control room exhaust subsystem isolation damper(s) close, and the exhaust fan trips off;

   c. The control room emergency makeup air and filtration subsystem actuates with flows through the HEPA filters and charcoal adsorber banks;

C:

* ANSI N510-1980 shall be used in place of ANSI N510-1975 as referenced in Regulatory Guide 1.52, Revision 2.

Enclosure 2 to NYN-89046

Revised Bases

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.

3/4.7.6 CONTROL ROOM ~~AREA VENTILATION SYSTEM~~ EMERGENCY MAKEUP AIR AND FILTRATION SUBSYSTEM

The OPERABILITY of the Control Room ~~Area Ventilation System~~ Emergency Makeup Air and Filtration Subsystem ensures that: (1) the allowable temperature for continuous-duty rating for the equipment and

3/4.7.6 CONTROL ROOM ~~AREA VENTILATION SYSTEM~~ EMERGENCY MAKEUP AIR AND FILTRATION SUBSYSTEM (Continued)

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. INSERT A 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. INSERT B

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.

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

INSERTS FOR REVISED TECHNICAL SPECIFICATION BASES

A:

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%.

B:

ANSI N510-1980 will be used as a procedural guide for surveillance testing.

Enclosure 3 to NYN-89046

Basis for Proposed Technical Specification Changes

Background:

USNRC Inspection Report 50-443/86-54 identified that the Seabrook Station Control Building HVAC (CBA) System was susceptible to a single active failure which would cause the isolation of both trains of the makeup air system. New Hampshire Yankee (NHY), in letters dated February 9, 1987 (NYN-87013) and March 2, 1987 (NYN-88024), provided justification for operation in this configuration up to 5% power and committed to modify the system design prior to full power operation.

Details of the proposed design modifications were provided to the NRC Staff via NHY letters dated January 22, 1988 (NYN-88007) and June 17, 1988 (NYN-88084). The results of the NRC Staff review of this design modification are documented in an NRC letter dated August 24, 1988.

Description of Proposed Changes:

As a result of the above referenced design modification, the current Seabrook Station Technical Specification (3/4.7.6) will not reflect the system design nor will it adequately define system operability requirements. The proposed change is based on the Westinghouse Standard Technical Specifications which have been modified to reflect plant specific information.

Safety Evaluation of Proposed Changes:

New Hampshire Yankee has reviewed the proposed changes utilizing the criteria specified in 10 CFR 50.92 and has determined that the proposed changes would not

1. Involve a significant increase in the probability or consequences of an accident previously evaluated. This specification is being modified to ensure Control Room habitability during all operational modes. With the Control Room habitable as defined by 10 CFR 50 Appendix A, GDC 19 and Section 6.4 of the Standard Review Plan (SRP), proper conduct of operations will not be hindered by the Control Room environment. With Control Room habitability ensured, proper mitigation of design basis accidents can be performed by the Control Room personnel as currently described in the FSAR. Proper mitigation of the accident(s) ensures that radiological releases to the environment remain within limits established by existing design basis analyses.

2. Create the possibility of a new or different kind of accident from any previously evaluated. Because these revised Technical Specifications ensure that Control Room habitability as defined in pertinent regulatory criteria is maintained, proper conduct of operations will not be hindered by the Control Room environment. Therefore, no type of accident could be caused directly or indirectly by this change.

3. Involve a significant reduction in a margin of safety. The proposed changes reflect the revised system design which ensures that Control Room operation doses would be within the GDC-19 acceptance criteria and that the system will provide protection in accordance with SRP Section 6.4, 6.5.1, and 9.4.1.