

Docket No. 50-213  
B14722

Attachment 1  
Haddam Neck Plant  
Proposed Revision to Technical Specifications  
Ultimate Heat Sink - Marked Up Pages

February 1994

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INDEX

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

<u>SECTION</u>	<u>PAGE</u>
TABLE 4.7-1 SECONDARY COOLANT SYSTEM SPECIFIC ACTIVITY	
SAMPLE AND ANALYSIS PROGRAM.....	3/4 7-6
Main Steam Line Trip Valves.....	3/4 7-7
3/4.7.2 STEAM GENERATOR PRESSURE/TEMPERATURE LIMITATION.....	3/4 7-8
3/4.7.3 SERVICE WATER SYSTEM.....	3/4 7-9
3/4.7.4 SNUBBERS.....	3/4 7-10
TABLE 4.7-2 SNUBBER VISUAL INSPECTION INTERVAL.....	3/4 7-10a
3/4.7.5 SEALED SOURCE CONTAMINATION.....	3/4 7-14
3/4.7.6 FIRE SUPPRESSION SYSTEMS	
Fire Water Supply/Distribution System.....	3/4 7-16
Spray and/or Sprinkler Systems.....	3/4 7-19
CO <sub>2</sub> Systems.....	3/4 7-21
Halon Systems.....	3/4 7-22
Fire Stations.....	3/4 7-23
TABLE 3.7-4 FIRE STATIONS.....	3/4 7-24
Yard Fire Hydrants and Associated Fire Hose Houses.....	3/4 7-25
TABLE 3.7-5 YARD FIRE HYDRANTS.....	3/4 7-27
3/4.7.7 FIRE RATED ASSEMBLIES.....	3/4 7-28
3/4.7.8 FLAMMABLE LIQUIDS CONTROL.....	3/4 7-30
3/4.7.9 FEEDWATER ISOLATION VALVES.....	3/4 7-31
TABLE 3.7-6 FEEDWATER ISOLATION VALVES.....	3/4 7-32
3/4.7.10 EXTERNAL FLOOD PROTECTION.....	3/4 7-33
3/4.7.11 PRIMARY AUXILIARY BUILDING AIR CLEANUP SYSTEM.....	3/4 7-34
3/4.7.12 ULTIMATE HEAT SINK	3/4 7-36
<u>3/4.8 ELECTRICAL POWER SYSTEMS</u>	
3/4.8.1 A.C. SOURCES	
Operating.....	3/4 8-1
TABLE 4.8-1 DIESEL GENERATOR TEST SCHEDULE.....	3/4 8-6
Shutdown.....	3/4 8-7
3/4.8.2 D.C. SOURCES	
Operating.....	3/4 8-8
TABLE 4.8-2 BATTERY SURVEILLANCE REQUIREMENTS.....	3/4 8-10
Shutdown.....	3/4 8-11

0038

INDEX

PAGES

<u>SECTION</u>	<u>PAGE</u>
3/4.4.7 CHEMISTRY.....	B 3/4 4-7
3/4.4.8 SPECIFIC ACTIVITY.....	B 3/4 4-7
3/4.4.9 PRESSURE/TEMPERATURE LIMITS.....	B 3/4 4-8
3/4.4.10 STRUCTURAL INTEGRITY.....	B 3/4 4-12
3/4.4.11 REACTOR COOLANT SYSTEM VENTS.....	B 3/4 4-12
3/4.4.12 FAILED FUEL RODS.....	B 3/4 4-13
<u>3/4.5 EMERGENCY CORE COOLING SYSTEMS</u>	
3/4.5.1 & 3/4.5.2 ECCS SUBSYSTEMS.....	B 3/4 5-1
3/4.5.3 REFUELING WATER STORAGE TANK.....	B 3/4 5-2
3/4.5.4 pH CONTROL SYSTEM.....	B 3/4 5-2
<u>3/4.6 CONTAINMENT SYSTEMS</u>	
3/4.6.1 PRIMARY CONTAINMENT.....	B 3/4 6-1
3/4.6.2 CONTAINMENT AIR RECIRCULATION SYSTEM.....	B 3/4 6-3
3/4.6.3 CONTAINMENT ISOLATION VALVES.....	B 3/4 6-3
<u>3/4.7 PLANT SYSTEMS</u>	
3/4.7.1 TURBINE CYCLE.....	B 3/4 7-1
3/4.7.2 STEAM GENERATOR PRESSURE/TEMPERATURE LIMITATION.....	B 3/4 7-2
3/4.7.3 SERVICE WATER SYSTEM.....	B 3/4 7-2
3/4.7.4 SNUBBERS.....	B 3/4 7-3
3/4.7.5 SEALED SOURCE CONTAMINATION.....	B 3/4 7-4
3/4.7.6 FIRE SUPPRESSION SYSTEMS.....	B 3/4 7-4
3/4.7.7 FIRE RATED ASSEMBLIES.....	B 3/4 7-5
3/4.7.8 FLAMMABLE LIQUIDS CONTROL.....	B 3/4 7-5
3/4.7.9 FEEDWATER ISOLATION VALVES.....	B 3/4 7-6
3/4.7.10 EXTERNAL FLOOD PROTECTION.....	B 3/4 7-6
3/4.7.11 PRIMARY AUXILIARY BUILDING AIR CLEANUP SYSTEM.....	B 3/4 7-6
3/4.7.12 ULTIMATE HEAT SINK	B 3/4 7-6

025

PLANT SYSTEMS

3/4.7.12 ULTIMATE HEAT SINK

LIMITING CONDITION FOR OPERATION

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3.7.12 The ultimate heat sink shall be OPERABLE with an average circulating water inlet temperature of less than or equal to 90°F.

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

ACTION:

With the requirements of the above specification not satisfied, be in at least HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

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4.7.12 The ultimate heat sink shall be determined OPERABLE:

- a. At least once per 24 hours by verifying the average circulating water inlet temperature to be within limits.

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PLANT SYSTEMSBASES3/4.7.9 FEEDWATER ISOLATION VALVES

The accident analysis for a main steam line break assumes that the main feedwater isolation valves will close on a containment isolation actuation signal (CIAS). Also, the closure of these valves based on a CIAS is credited in determining the Pressure/Temperature limits for the purpose of environmental qualification. The feedwater isolation valves act as a backup to the feedwater regulation valves in the event a feedwater regulation valve fails open during a Main Steam Line Break.

3/4.7.10 EXTERNAL FLOOD PROTECTION

The thresholds regarding flood protection ensure that facility protective actions will be taken (and the orderly shutdown of the plant to MODE 3 will be made) in the event of flood conditions. The estimated Connecticut River probable maximum flood (PMF) level, including wave effects (i.e., still water level), is 39.5 feet mean sea level. Normal flood control measures provide protection to safety-related equipment to El. 30 feet mean sea level. Normal flood protection to this elevation is based on a low probability of exceedance and structural capacity limitations. Based on the one to two day rise period of the PMF, alternative means of providing decay heat removal for flooding events up to the PMF is provided in AOP 3.2-24.

3/4.7.11 PRIMARY AUXILIARY BUILDING AIR CLEANUP SYSTEM

PAB Air Cleanup System consists of two exhaust fans, two prefilters, a HEPA-HECA filter assembly, and interconnecting ductwork.

Air cleanup is accomplished using one exhaust fan, one prefilter, the HEPA-HECA filter, and interconnected ductwork.

The radiological consequences analyses for loss-of-coolant accidents assume Primary Auxiliary Building efficiencies which are ensured by this Technical Specification. Also, in consideration of a fuel handling accident inside containment, (i.e., when the containment is being purged) the purge discharge would be directed through the Primary Auxiliary Building charcoal filters. Credit is again taken for these filters in reducing the radiological consequences.

← INSERT 1A

## INSERT 1A

### 3/4.7.12 ULTIMATE HEAT SINK

The limitation on the ultimate heat sink temperature during MODES 1, 2, 3, and 4 is to ensure that sufficient cooling is available to support all required design basis safety related functional requirements. The technical specification is based on not exceeding the temperature limit at any time the plant is in the applicable operating mode (not just during the required 24 hour surveillance).

The temperature in the Ultimate Heat Sink is monitored by temperature elements, one in the inlets to each of the condenser water boxes. The data from the temperature elements is fed to the plant computer which continuously averages the values to produce one temperature which is displayed on the plant computer. The condenser inlet water temperature elements provide a representative temperature of the water in the Ultimate Heat Sink due to the mixing of water as it enters the intake structure and the arrangement of the pumps.

The plant computer provides continuous temperature monitoring of the Ultimate Heat Sink. The plant computer will alarm should the temperature exceed 90F. If the plant computer should be out of service, plant procedures require that the temperature of the Ultimate Heat sink be obtained hourly by locally monitoring the temperature of the condenser water boxes.

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Attachment 2  
Haddam Neck Plant  
Proposed Revision to Technical Specifications  
Ultimate Heat Sink - Retyped Pages

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INDEX

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

<u>SECTION</u>	<u>PAGE</u>
TABLE 4.7-1	SECONDARY COOLANT SYSTEM SPECIFIC ACTIVITY
	SAMPLE AND ANALYSIS PROGRAM . . . . . 3/4 7-6
	Main Steam Line Trip Valves . . . . . 3/4 7-7
3/4.7.2	STEAM GENERATOR PRESSURE/TEMPERATURE LIMITATION . . . . 3/4 7-8
3/4.7.3	SERVICE WATER SYSTEM . . . . . 3/4 7-9
3/4.7.4	SNUBBERS . . . . . 3/4 7-10
TABLE 4.7-2	SNUBBER VISUAL INSPECTION INTERVAL . . . . . 3/4 7-10a
3/4.7.5	SEALED SOURCE CONTAMINATION . . . . . 3/4 7-14
3/4.7.6	FIRE SUPPRESSION SYSTEMS
	Fire Water Supply/Distribution System . . . . . 3/4 7-16
	Spray and/or Sprinkler Systems . . . . . 3/4 7-19
	CO <sub>2</sub> Systems . . . . . 3/4 7-21
	Halon Systems . . . . . 3/4 7-22
	Fire Stations . . . . . 3/4 7-23
TABLE 3.7-4	FIRE STATIONS . . . . . 3/4 7-24
	Yard Fire Hydrants and Associated Fire Hose Houses . . . . 3/4 7-25
TABLE 3.7-5	YARD FIRE HYDRANTS . . . . . 3/4 7-27
3/4.7.7	FIRE RATED ASSEMBLIES . . . . . 3/4 7-28
3/4.7.8	FLAMMABLE LIQUIDS CONTROL . . . . . 3/4 7-30
3/4.7.9	FEEDWATER ISOLATION VALVES . . . . . 3/4 7-31
TABLE 3.7-6	FEEDWATER ISOLATION VALVES . . . . . 3/4 7-32
3/4.7.10	EXTERNAL FLOOD PROTECTION . . . . . 3/4 7-33
3/4.7.11	PRIMARY AUXILIARY BUILDING AIR CLEANUP SYSTEM . . . . . 3/4 7-34
3/4.7.12	ULTIMATE HEAT SINK . . . . . 3/4 7-36
<u>3/4.8</u>	<u>ELECTRICAL POWER SYSTEMS</u>
3/4.8.1	A.C. SOURCES
	Operating . . . . . 3/4 8-1
TABLE 4.8-1	DIESEL GENERATOR TEST SCHEDULE . . . . . 3/4 8-6
	Shutdown . . . . . 3/4 8-7
3/4.8.2	D.C. SOURCES
	Operating . . . . . 3/4 8-8
TABLE 4.8-2	BATTERY SURVEILLANCE REQUIREMENTS . . . . . 3/4 8-10
	Shutdown . . . . . 3/4 8-11



## INDEX

### BASES

<u>SECTION</u>		<u>PAGE</u>
3/4.4.7	CHEMISTRY . . . . .	B 3/4 4-7
3/4.4.8	SPECIFIC ACTIVITY . . . . .	B 3/4 4-7
3/4.4.9	PRESSURE/TEMPERATURE LIMITS . . . . .	B 3/4 4-8
3/4.4.10	STRUCTURAL INTEGRITY . . . . .	B 3/4 4-12
3/4.4.11	REACTOR COOLANT SYSTEM VENTS . . . . .	B 3/4 4-12
3.4.4.12	FAILED FUEL RODS . . . . .	B 3/4 4-13
 <u>3/4.5 EMERGENCY CORE COOLING SYSTEMS</u>		
3/4.5.1 & 3/4.5.2	ECCS SUBSYSTEMS . . . . .	B 3/4 5-1
3/4.5.3	REFUELING WATER STORAGE TANK . . . . .	B 3/4 5-2
3/4.5.4	pH CONTROL SYSTEM . . . . .	B 3/4 5-2
 <u>3/4.6 CONTAINMENT SYSTEMS</u>		
3/4.6.1	PRIMARY CONTAINMENT . . . . .	B 3/4 6-1
3/4.6.2	CONTAINMENT AIR RECIRCULATION SYSTEM . . . . .	B 3/4 6-3
3/4.6.3	CONTAINMENT ISOLATION VALVES . . . . .	B 3/4 6-3
 <u>3/4.7 PLANT SYSTEMS</u>		
3/4.7.1	TURBINE CYCLE . . . . .	B 3/4 7-1
3/4.7.2	STEAM GENERATOR PRESSURE/TEMPERATURE LIMITATION . . . . .	B 3/4 7-2
3/4.7.3	SERVICE WATER SYSTEM . . . . .	B 3/4 7-2
3/4.7.4	SNUBBERS . . . . .	B 3/4 7-3
3/4.7.5	SEALED SOURCE CONTAMINATION . . . . .	B 3/4 7-4
3/4.7.6	FIRE SUPPRESSION SYSTEMS . . . . .	B 3/4 7-4
3/4.7.7	FIRE RATED ASSEMBLIES . . . . .	B 3/4 7-5
3/4.7.8	FLAMMABLE LIQUIDS CONTROL . . . . .	B 3/4 7-5
3/4.7.9	FEEDWATER ISOLATION VALVES . . . . .	B 3/4 7-6
3/4.7.10	EXTERNAL FLOOD PROTECTION . . . . .	B 3/4 7-6
3/4.7.11	PRIMARY AUXILIARY BUILDING AIR CLEANUP SYSTEM . . . . .	B 3/4 7-6
3/4.7.12	ULTIMATE HEAT SINK . . . . .	B 3/4 7-6

PLANT SYSTEMS

3/4.7.12 ULTIMATE HEAT SINK

LIMITING CONDITION FOR OPERATION

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## PLANT SYSTEMS

### BASES

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The temperature in the Ultimate Heat Sink is monitored by temperature elements, one in the inlets to each of the condenser boxes. The data from the temperature elements is fed to the plant computer which continuously averages

## PLANT SYSTEMS

### BASES

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#### 3/4.7.12 ULTIMATE HEAT SINK (Continued)

the values to produce one temperature which is displayed on the plant computer. The condenser inlet water temperature elements provide a representative temperature of the water in the Ultimate Heat Sink due to the mixing of water as it enters the intake structure and the arrangement of the pumps.

The plant computer provides continuous temperature monitoring of the Ultimate Heat Sink. The plant computer will alarm should the temperature exceed 90°F. If the plant computer should be out of service, plant procedures require that the temperature of the Ultimate Heat Sink be obtained hourly by locally monitoring the temperature of the condenser water boxes.