Docket No. 50-213
B13333

Attachment 1

Haddam Neck Plant

Proposed Revised Technical Specifications

August 1989

Section 3.6.2

CONTAINMENT AIR RECIRCULATION SYSTEM

3/4.6.2 CONTAINMENT AIR RECIRCULATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.2 At least four containment air recirculation (CAR) units shall be OPERABLE.

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

ACTION:

With only three CAR units OPERABLE, restore the inoperable CAR unit 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.

SURVEILLANCE REQUIREMENTS

4.6.2 Each CAR unit shall be demonstrated OPERABLE:

a. At least once per 31 days by:

1) Starting each non-operating fan from the control room and verifying that each non-operating fan operates for at least 15 minutes,

2) Verifying a heat removal rate of greater than or equal to 26.5×10^6 Btu/hr at 261°F containment conditions.

3) A visual inspection of each bank of filters and housing for signs indicating the existence of unusual conditions and pressure drop determination and,

4) Performing the damper operation and positioning tests.

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 15 minutes;

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 system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 1% and uses the test procedures guidance in Regulatory Positions C.5.a, C.5.c, and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and total flow rate is greater than or equal to 150,000 cfm from any three CAR units (52,500 ± 2500 cfm per unit);

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 10% at test conditions of 266°F, 95% relative humidity, 40 psig, and 55 feet/min face velocity in accordance with ASTM D3803; and

3) Verifying each CAR unit flow rate of 52,500 ± 2500 cfm during system operation when tested in accordance with ANSI N510-1980.

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 10% at test conditions of 266°F, 95% relative humidity, 40 psig, and 55 feet/min. face velocity in accordance with ASTM D3803;

e. At least once per 18 months by:

1) Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks for each CAR unit is less than 6 inches Water Gauge while operating each CAR unit at a flow rate of 52,500 ± 2500 cfm;

2) Verifying that the system starts on a Containment Pressure-High test signal; and

f. After each complete or partial replacement of a HEPA filter bank, by verifying that the affected CAR unit satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 1% in accordance with ANSI N510-1980 for a DOP test aerosol while operating the CAR unit at a flow rate of 52,500 ± 2500 cfm; and

g. After each complete or partial replacement of a charcoal adsorber bank, by verifying that the affected CAR unit satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 1% in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating the CAR unit at a flow rate of 52,500 ± 2500 cfm.

Containment purge is utilized as a back-up means of venting hydrogen from the containment following a loss-of-coolant accident. The containment air particulate monitoring system provides the primary means of purging because it provides adequate purge flow to prevent an explosive mixture build-up while allowing fine control of the release of radioactivity during purges. When necessary to effect repairs to the containment purge or purge bypass isolation valves, a blank flange must be applied to the 42" purge air exhaust penetration inside the reactor containment so that the containment remains leak tight. This renders the purge system inoperable for a finite time. Seven days is considered a reasonable length of time for repair parts to be received, installed and the system retested for leak tightness and returned to service.

3/4.6.2 CONTAINMENT AIR RECIRCULATION SYSTEM

The OPERABILITY of the Containment Air Recirculation System ensures that: (1) the containment air temperature will be maintained within limits during normal operation, and (2) adequate heat removal capacity is available when operated during post-LOCA or Steam Line Break conditions.

The Containment Air Recirculation System will also ensure adequate mixing of the containment atmosphere following a LOCA, to prevent localized accumulation of hydrogen and hydrogen concentrations from exceeding explosive limits.

The OPERABILITY of the containment filter trains ensures that sufficient iodine removal capability will be available in the event of a LOCA. The reduction in containment iodine inventory reduces the resulting SITE BOUNDARY radiation doses associated with containment leakage. Operation of the system for at least 15 minutes in a 31-day period is sufficient to determine OPERABILITY of the system. The operation of this system and resultant iodine removal capacity are consistent with the assumptions used in the LOCA analyses. ANSI N510-1980 will be used as a procedural guide for surveillance testing.

3/4.6.3 CONTAINMENT ISOLATION VALVES

The OPERABILITY of the containment isolation valves ensures that the containment atmosphere will be isolated from the outside environment in the event of a release of radioactive material to the containment atmosphere or pressurization of the containment. Containment isolation within the time limits specified ensures that the release of radioactive material to the environment will be consistent with the assumptions used in the analyses for a LOCA. UFSAR Table 7.3-1 lists all containment isolation valves. The addition or deletion of any containment isolation valve shall be made in accordance with Section 50.59 of 10CFR50 and approved by the Plant Operations Review Committee.

Section 3.9.11

WATER LEVEL - STORAGE POOL

REFUELING OPERATIONS

3/4.9.11 WATER LEVEL-STORAGE POOL

LIMITING CONDITION FOR OPERATION

3.9.11 At least 20 feet of water shall be maintained over the top of irradiated fuel assemblies seated in the storage racks.

APPLICABILITY: Whenever irradiated fuel assemblies are in the storage pool.

ACTION:

a. With the requirements of the above specification not satisfied, suspend all movements of fuel assemblies and crane operations with loads in the fuel storage areas and restore the water level to within its limit within 4 hours.

b. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.11 The water level in the storage pool shall be determined to be at least its minimum required depth at least once per 7 days when irradiated fuel assemblies are in the fuel storage pool.

Section 3.9.12

FUEL STORAGE BUILDING AIR CLEANUP SYSTEM

REFUELING OPERATIONS

3/4.9.12 FUEL STORAGE BUILDING AIR CLEANUP SYSTEM

LIMITING CONDITION FOR OPERATION

3.9.12 The Fuel Storage Building Air Cleanup System shall be OPERABLE and in operation.

APPLICABILITY: During operations involving movement of fuel within the storage pool or crane operation with loads over the storage pool.

ACTION:

a. With the Fuel Storage Building Air Cleanup System inoperable, or not operating, suspend all operations involving movements of fuel within the storage pool or crane operation with loads over the storage pool.

b. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.12 The Fuel Storage Building Air Cleanup System shall be demonstrated OPERABLE and in operation:

a. 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 system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 1% and uses the test procedure guidance in Regulatory Positions C.5.a, C.5.c, and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the system flow rate is 4000 cfm $\pm$ 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 10% at test conditions of 86°F, 95% relative humidity atmospheric pressure, and 40 feet/min face velocity in accordance with ASTM D3803; and

3) Verifying a system flow rate of 4000 cfm $\pm$ 10% during system operation when tested in accordance with ANSI N510-1980.

b. 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 10% at test conditions of 86°F, 95% relative humidty, atmospheric pressure, and 40 feet/min. fact velocity in accordance with ASMT D3803.

c. At least once per 18 months by:

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 4000 cfm ± 10%, and

2) Verifying that the system maintains the spent fuel storage pool area at a negative pressure of greater than 0 inch Water Gauge differential relative to the outside atmosphere during system operation.

d. After each complete or partial replacement of a HEPA filter bank, by verifying that the cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 1% in accordance with ANSI N510-1980 for a DOP test aerosol while operating the system at a flow rate of 4000 cfm ± 10%; and

e. After each complete or partial replacement of a charcoal adsorber bank, by verifying that the cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 1% in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating the system at a flow rate of 4000 cfm ± 10%.

3/4.9.10 and 3/4.9.11 WATER LEVEL - REACTOR VESSEL AND STORAGE POOL

The restrictions on minimum water level ensure that sufficient water depth is available to remove 99% of the assumed 10% iodine gap activity released from the rupture of an irradiated fuel assembly. The minimum water depth is consistent with the assumptions of the safety analysis.

3/4.9.12 FUEL STORAGE BUILDING AIR CLEANUP SYSTEM

The limitations on the Fuel Storage Building Air Cleanup System ensure that all radioactive material released from an irradiated fuel assembly will be filtered through the HEPA fiters and charcoal adsorber prior to cischarge to the atmosphere. The OPERABILITY of this system and the resulting iodine removal capacity are consistent with the assumptions of the safety analysis. ANSI N510-1980 will be used as a procedural guide for surveillance testing.

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Attachment 2

HADDAM NECK PLANT

DESCRIPTION OF TECHNICAL SPECIFICATIONS
AND SIGNIFICANT HAZARDS CONSIDERATION DISCUSSION

Section 3.6.2 - Containment Air Recirculation System
Section 3.9.11 - Water Level - Storage Pool
Section 3.9.12 - Fuel Storage Building Air Cleanup System

August 1989

Section 3.6.2

Containment Air Recirculation System

Technical Specification Section 3.6.2
Containment Air Recirculation System

The proposed revised Technical Specification (RTS) Section 3.6.2 and corresponding bases section have been prepared by converting the existing Technical Specification Section 3.11.D, "Air Recirculation System," and 4.4.IV, "Air Filtration System" to a format consistent with the Westinghouse Standard Technical Specifications (W STS). In addition, the requirements of Administrative Technical Specification[1] Section 3.11.D and 4.4.IV have been included. The proposed changes are compared to the existing Technical Specifications and the W STS. A matrix summarizing this comparison is included in Attachment 3.

The proposed RTS Section 3.6.2 provides a limiting condition for Operation (LCO), Applicability/Action and Surveillance Requirements as they apply to the containment air recirculation (CAR) system at the Haddam Neck Plant. Having four CAR units operable, as required in both the existing Administrative Technical Specification and the proposed RTS, will eliminate the possibility of a single failure bringing the plant into the unsafe condition of having less than three CAR units available (as in the existing Technical Specification Section 3.11.D). The proposed RTS is more restrictive in that it is applicable in Modes 1 through 4 whereas the existing Technical Specification is only applicable whenever the reactor is critical (Modes 1 and 2). The proposed RTS section is equivalent to the existing Technical Specifications and the W STS with the following exceptions:

1) The W STS, Section 4.6.2.a, Paragraph 2 requires the surveillance of cooling water flow to the CAR fans as a method of ensuring that adequate heat removal capacity is available during a loss of coolant accident to maintain containment integrity. For the Haddam Neck Plant, solely monitoring changes in the cooling water flow rate is not appropriate for ensuring proper CAR fan performance. Thus, another method of monitoring the CAR duty by a combination of flow and pressure drop is being proposed. This method will ensure that 26.5×10^6 BTU/hr of heat removal capacity is available under the containment accident condition of 261°F. The duty of 26.5×10^6 Btu/hr at 261°F has been shown to be adequate to maintain the containment pressure below the design pressure of 40 psig. A surveillance procedure is being developed to address this. The design change that installs the instrumentation used to perform this surveillance will address their compatibility with existing system design requirements.

2) The existing surveillance requirement, (i.e., Administrative Technical Specification 4.4.IV.D.4) a monthly verification of charcoal

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(1) Administrative Technical Specifications at the Haddam Neck Plant are administrative procedures that were implemented as an interim measure prior to converting the Technical Specifications to the W STS format.

spray valve operability, is not necessary and is not required by the W STS. It is also not credited in any design basis analysis. Further, this surveillance is not specified in Technical Specifications for similar equipment at the Millstone Station. Therefore, it is not included in the proposed RTS.

3) The specified flow rates (i.e., 52000 cfm for the CAR system) in the surveillance requirements are based on equipment design specifications.

4) The in-place penetration and bypass leakage testing acceptance criteria of "less than 1%" is specified consistent with guidance provided by NRC Generic Letter 83-13. This leakage criteria is based on a 90% filter efficiency assumed in the NRC Safety Evaluations, References (1) and (2).

Surveillance requirements 4.6.2.c(2), 4.6.2.d, reflect environmental conditions specified by Table 5-1 of ANSI N509-1980. A test condition of 55 feet/minute is specified to agree with the original design specifications.

Table 1 presents the efficiency requirements from the existing Technical Specifications, the Administrative Technical Specifications, the proposed RTS and Generic Letter 83-13. It is noted that the requirements in the proposed RTS are consistent with Generic Letter 83-13 which are based on the accident calculation assumptions.

For the charcoal filter bypass test, the proposed RTS is consistent with (or more restrictive than) existing Technical Specifications.

For the HEPA filter bypass, the proposed RTS is a factor of two less restrictive than Administrative Technical Specifications (1% bypass allowed vs. 0.5%). The basis and source of the 99.5% value in the Administrative Technical Specifications is uncertain. Based on Generic Letter 83-13, a 99% measured efficiency is sufficient to ensure the assumed efficiency of 95% and hence was used in the proposed specification. For the charcoal filter iodine removal test, the 90% methyl requirement is more restrictive than the 85% requirement of the Administrative Technical Specifications. Its comparison with the existing Technical Specification of 99% is unclear since the current Technical Specifications are unclear on the chemical species of iodine. In regard to the elemental efficiency, generic industry practice is to only require the methyl test, as providing > 90% methyl iodide efficiency for activated charcoal ensures an efficiency for elemental much greater than 99%. Hence, the proposed specifications meet the intent of the current Administrative Technical Specifications.

In summary, current requirements are somewhat confusing and may in cases be overly restrictive. The proposed specifications are consistent with NRC guidance and will ensure calculated accident consequences will not increase.

Significant Hazards Consideration

In accordance with 10CFR50.92, CYAPCO has reviewed the proposed RTS section and has concluded that it does not involve a significant hazards consideration. The basis for this conclusion is that the three criteria of 10CFR50.92(c) are not compromised. The proposed RTS does not involve a significant hazards consideration because the changes would not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated. The determination of whether or not a proposed change is equivalent, more restrictive (or a new requirement), or less restrictive is based on the Limiting Condition for Operation and Applicability Requirements since it is these requirements which will impact the design basis accidents. In general, the conversion to the W STS yields more extensive and/or restrictive Action and Surveillance Requirements. As described above, most of the changes are more restrictive in that they are a conservative change and there are no comparable requirements in the existing Technical Specifications. This will help ensure the operability and reliability of the systems covered under the proposed RTS. Based upon the above discussion, the proposed RTS will not increase the probability or consequences of any accident previously analyzed.

2. Create the possibility of a new or different kind of accident from any previously evaluated. Since there are no hardware modifications associated with the proposed changes, the performance of safety-related systems remains unaffected during operations. The operability requirements are increased over the current requirements thus enhancing the performance of safety systems. Therefore, the proposed RTS will not modify the plant response to the point where it can be considered a new accident nor are any credible failure modes created.

3. Involve a significant reduction in the margin of safety. There are no plant modifications associated with these changes and hence, there is no direct impact on the protective boundaries. The proposed RTS do not affect the safety limits of the protective boundaries and the bases of the proposed RTS have been modified to reflect the proposed changes.

References: (1) D. M. Crutchfield letter to W. G. Council, SEP Topic XV-20, Radiological Consequences of Fuel Damaging Accident (Inside and outside containment) - Haddam Neck, dated June 9, 1981.

(2) D. L. Ziemann letter to W. G. Counsil, SEP Topic XV-19, dated December 20, 1979.

TABLE 1

TEST	EFFICIENCY			
	EXISTING TECHNICAL SPECIFICATION (T.S.)	EXISTING ADMINISTRATIVE T.S.	PROPOSED RTS	GENERIC* LETTER 83-13
HEPA Filter - Bypass Test (DOP)	None	99.5%	99%	99%
Charcoal Filter - Bypass Test (Freon)	95%	99%	99%	99%
Charcoal Filter - Lab Test	99% Species Unspecified	99.9% Elemental 85% Organic	90% Organic	90% Organic

* Based on assumed removal efficiencies in the LOCA Rad Dose Calculation of 95% Particulate, 90% Elemental, and 30% Organic

Section 3.9.11

Water Level - Storage Pool

Technical Specification Section 3.9.11
Water Level - Storage Pool

The proposed revised Technical Specification 3.9.11 submitted via Reference (1) requires 21 feet of water over the top of irradiated fuel assemblies in the spent fuel pool. At this level, certain equipment and components may be damaged due to water/boric acid exposure. Specifically, with the spent fuel pool level at 21 feet, the front seal of the sluice gate air cylinder would be located 8 to 9 inches below the pool water surface. In addition, the RCCA change tool is stored on the wall of the spent fuel pool. The close proximity of the change tool control panel to the water could make them susceptible to corrosion from boric acid exposure. The proposed change will lower the required level to 20 feet of water over the top of irradiated fuel assemblies. Based on an evaluation of Reference (2), this water level still ensures an overall decontamination factor (DF) of 100 for iodine which is consistent with the assumptions used in the fuel handling accident dose calculations.

Significant Hazards Consideration

In accordance with 10CFR50.92, CYAPCO has reviewed the proposed RTS Section and has concluded that it does not involve a significant hazards consideration. The basis for this conclusion is that the three criteria of 10CFR50.92(c) are not compromised. The proposed RTS does not involve a significant hazards consideration because the change would not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated. With the 20 feet of water the DF is calculated as approximately 250 which is conservative compared to the assumed DF of 133 in Regulatory Guide 1.25, Revision 2. Therefore, it is concluded that the 20 feet level will still bound the design basis fuel handling accident dose calculation. There is no impact on the probability of failure of any safety systems due to the change. Therefore, it is concluded that previously analyzed accidents are not affected.

2. Create the possibility of a new or different kind of accident from any previously analyzed. Since there are no changes in the way the plant is operated, the potential for an unanalyzed accident is not created. No new failure modes are introduced.

3. Involve a significant reduction in a margin of safety. Since the change does not affect the consequences of any accident previously analyzed, there is no reduction in a margin of safety.

References: (1) E. J. Mroczka letter to the U.S. Nuclear Regulatory Commission, Revised Technical Specifications Sections 1.0, 3/4.2, 3/4.9, 3/4.10, 3/4.11, 5.0, and 6.0, dated October 26, 1988.

(2) WCAP-7828 - Radiological Consequences of a Fuel Handling Accident, December 1971.

Section 3.9.12

Fuel Storage Building Air Cleanup System

Technical Specification Section 3.9.12
Fuel Storage Building Air Cleanup System

The proposed revised Technical Specification (RTS) Section 3.9.12 was submitted on October 26, 1988 (Reference (1)).

The modifications to this specification include modifying the methyl iodide penetration acceptance criteria and test conditions, modifying the flow rate testing from ANSI N510-1975 to ANSI N510-1980, and adding the word differential in the spent fuel pool area pressure verification.

The addition of the word differential clarifies the intent of the verification. Basically, the changes are consistent with the accident analysis assumptions, system design, and applicable standards. This means that the changes provide assurance that the system will perform as assumed in the design basis analysis.

Significant Hazards Consideration

In accordance with 10CFR50.92, CYAPCO has reviewed the proposed changes and has concluded that they do not involve a significant hazards consideration. The basis for this conclusion is that the three criteria of 10CFR50.92(c) are not compromised. The proposed changes do not involve a significant hazards consideration because the changes would not:

1) Involve a significant increase in the probability or consequences of an accident previously analyzed. The proposed changes are consistent with the design basis assumptions; there is no negative impact on the probability or consequences of any accident.

2) Create the possibility of a new or different kind of accident. None of the proposed changes affect the way the plant is operated or alter its response, nor do they introduce any new failure modes.

3) Involve a significant reduction in a margin of safety. The proposed changes do not negatively impact the consequences of any accident. Also, they have no adverse impact on any of the protective boundaries. Therefore, there can be no negative impact on any margin of safety.

Reference (1) E. J. Mroczka letter to the U.S. Nuclear Regulatory Commission, Revised Techical Specifications Section 1.0, 3/4.2, 3/4.9, 3/4.10, 3/4.11, 5.0 and 6.0, dated October 26, 1988.

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Attachment 3

Technical Specification Comparison Matrix

August 1989

TECHNICAL SPECIFICATION COMPARISON MATRIX

Introduction

The Technical Specification Comparison Matrix (TSCM) was prepared to facilitate the revision of the existing Haddam Neck Technical Specifications (T.S.). The TSCM is set up denoting the proposed Technical Specification section numbers in the left hand column followed by a short description. The next column lists the corresponding existing T.S. section number. The final two columns compare the requirements contained in the proposed section with the existing T.S. and the Westinghouse STS, respectively. The key at the bottom of each page provides an explanation for the symbols located in the two comparison columns. The equivalent notation "E" may either denote that exact wording has been transposed from the existing T.S. or different verbage conveying equivalent requirements has been used. In many cases, there was not a one-for-one relationship, but rather multi-section relationships, whereas the requirements in a given T.S. section may be divided between several different sections in the proposed Technical Specification. The additional requirement notation "++" denotes that the proposed Technical Specification is more restrictive because it is an entirely new requirement as compared to the existing T.S. or it is more restrictive in the sense that the existing T.S. requirements have been changed such that they are more restrictive. This matrix is provided in a summary fashion and highlights the more significant changes. A detailed comparison in terms of additional requirements and/or less restrictive requirements is provided in Attachment 2 of this submittal.

TECHNICAL SPECIFICATION

COMPARISON MATRIX

T.S.#	Description	Existing T.S. #	Comparison With Existing T.S.	Comparison With W STS
3.6.2	Containment Air Recirculation System			
	Limiting Condition for Operation	3.11.D Adm.	++	E(4)
	Applicability	3.11.D Adm.	++(1)	E(4)
	Action	3.11.D.2 Adm.	++(2)	E(4)
4.6.2.a.1	Non-operating Fan	4.4.IV.D.7 Adm.	E	E
4.6.2.9.2	Heat Removal Rate	-	++	D(5)
4.6.2.9.3	Visual Inspection	4.4.IV.D.2 Adm.	E	E
4.6.2.a.4	Damper Test	4.4.IV.D.3 Adm.	E	E
4.6.2.b	Staggered Test	-	++	*(3)
4.6.2.c	18-Month Test	4.4.IV B.1, C.3 and D.1 Adm. 4.4.IV.A.1, A.2 3.11.D.1 Adm.	E	E
4.6.2.d	720 Hours of Operation	4.4.IV.D.1	E	E
4.6.2.e.1	Pressure Drop Test	4.4.IV.A.4 Adm.	E	E
4.6.2.e.2	Pressure Test Signal	4.4.IV.D.6 Adm.	E	E
4.6.2.f	HEPA Filter Replacement	4.4.IV.D.6 Adm.	E	E
4.6.2.g	Charcoal Replacement	4.4.IV.D.5 Adm. 4.4.IV.B.2, A.2	E	E

Notes

E = Equivalent Requirements
* = Less restrictive requirement
++ = Additional Requirements
D = Different Requirements

(1) The proposed RTS is applicable to Modes 1-4 vs. Modes 1 and 2 in Current Technical Specifications.

(2) The proposed RTS requires shutdown with only 1 unit out of service vs. the existing Technical Specifications requirement of 2 units out of service.

(3) The proposed RTS requires system operation for 15 minutes vs. 10 hours in the Standard Technical Specifications. At the Haddam Neck Plant, the system does not have heaters. Therefore, system operation for 15 minutes is sufficient to demonstrate the function of the system.

(4) The proposed RTS requires four containment air circulation (CAR) units operable vs. two groups of CARs in W Standard Technical Specifications. The action statement in the proposed Revised Technical Specifications is based on the plant specific design and it meets the intent of W Standards Technical Specifications.

(5) For Detailed discussion for the differences, see Attachment 2.

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Attachment 4

Haddam Neck Plant

Existing Technical Specifications

Cross Reference

August 1989

CURRENT TECHNICAL SPECIFICATION CROSS REFERENCE

Current T.S.	Description	Proposed RTS #
3.11 Adm. Tech. Spec.		
3.11.D.1	Air Recirculation System Performance	4.6.2.6
3.11.D.2	Air Recirculation System Cold Shutdown Requirement	3.6.2
3.II.D	See Admin. Tech. Spec.	
4.4 Adm. Tech. Spec.	Containment Testing	
I.B.1	Acceptance Criteria	3.6.1.2a
III.B	Max Leakage Rate for RHR Operation	3.4.6.2.e
IV.A.4	Demonstrated condition for filteration unit	4.6.2.e
IV.B.1	Acceptable filter efficiencies	4.6.2.c.2
IV.C.3	Corrective Actions for Unusual Conditions	4.6.2.c
IV.D	Test Frequency	
IV.D.1	18-month test frequency	4.6.2.c, 4.6.2.d
IV.D.2	Visual Inspection	4.6.2.a.3
IV.D.3	Damper test	4.6.2.a.4
IV.D.4	Charcoal Spray Valve	-
IV.D.5	Halogenated Hydrocarbon Testing	4.6.2.g
IV.D.6	Cold DOP Test	4.6.2.f
IV.D.7	15-Minutes Operational Requirement	4.6.2.a.1
4.4	Containment Testing	
4.4.I.A	Integrated Leakage Test	4.6.1.2, 4.6.1.6.1
4.4.I.B.1	See Admin. Spec.	3.6.1.2.a
4.4.I.B.2	Max. Allowable Reduced Pressure Test (P_t) Leakage Rate	-
4.4.II.A	Individual Leak Detection Test	4.6.1.2, 4.6.1.3, 4.6.1.7.2
4.4.II.B	Acceptance Criterion	3.6.1.2.b
4.4.II.C	Corrective Action	3.6.1.2
4.4.II.D.1	Equipment hatch and fuel transfer Tube	4.6.1.1.c, 4.6.1.2
4.4.II.D.2	Isolation Valves	4.6.1.2.d
4.4.II.D.3	Personnel Air-lock Assembly	4.6.1.3, 4.6.1.1.b, 4.6.1.2.d
4.4.III.A	Recirculation System Test	4.4.6.2.1.g
4.4.III.B	Recirculation System Acceptance Criteria	3.4.6.2.e
4.4.III.C	Recirculation System Corrective Action	3.4.6.2
4.4.III.D	Recirculation System Test Frequency	4.4.6.2
4.4.IV	Air Filtration System	
4.4.IV.A	Tests	

4.4.IV.A.1	Measurement of Iodine Removal Efficiency	4.6.2.C.1
4.4.IV.A.2	In-place Freon 112 Test	4.6.2.g and 4.6.2.C.1
4.4.IV.A.3	Visual Inspection of Filter Banks	4.6.2.a.3
4.4.IV.A.4	Pressure drop across charcoal filter	4.6.2.a.3
4.4.IV.A.5	Damper Testing	4.6.2.a.4 and 4.6.2.e.2
4.4.IV.B	Acceptance Criteria	-
4.4.IV.B.1	See Admin. 4.4.IV.B.1	-
4.4.IV.B.2	Acceptable Charcoal Filter Efficiencies	4.6.2.g
4.4.IV.C	Corrective Action	-
4.4.IV.C.I	Replacement of Charcoal	-
4.4.IV.C.2	Location of Leakage Paths	-
4.4.IV.C.3	See Admin. Tech. Spec.	-
4.4.IV.D	See Admin. Tech. Spec.	-
4.4.IV.E	Summary of Technical Report	-