

ATTACHMENT 1

Table 1 Summary of Proposed Technical Specification Changes

Technical Specification	System	CURRENT		PROPOSED		% CHANGE IN RISK
		AOT (Days)	STI (Days)	AOT (Days)	STI (Days)	
3.1.2.4	Chemical and Volume Control (i.e. Charging Pumps)	3	N/C	10	N/C	-0.7 (B)
4.3.1	Reactor Protection	N/C	62	N/C	92	0.2
4.3.2	Engineered Safeguard Features Actuation	N/C	62	N/C	92	0.0
3.4.2.2	Pressurizer Safety Valves	15 min	N/C	1 Hour	N/C	*
3.4.4	Pressurizer PORV's	1 Hour	N/C	6 Hours	N/C	*
3.5.1	Accumulators	1 Hour	N/C	12 Hours	N/C	0.3
3.5.2	Emergency Core Cooling	3	N/C	10	N/C	1.3
3/4.5.6	Residual Heat Removal	3	92	10	184	0.0
4.6.1.7	Containment Ventilation	N/C	31	N/C	92	*
3/4.6.2.1	Containment Spray	3	92	10	184	0.0
3.6.2.2	Containment Spray Additive	3	N/C	10	N/C	0.0
3/4.6.2.3	Reactor Containment Fan Coolers	3	31	10	92	-0.1 (B)
3.6.3	Containment Isolation	4 Hours	N/C	24 Hours	N/C	*
3.7.1.1	Steam Generator Safety Relief Valves	4 Hours	N/C	24 Hours	N/C	*
3/4.7.1.2	Auxiliary Feedwater	3	31	10	92	30.4
3.7.3	Component Cooling Water	3	N/C	10	N/C	1.4 (A)

A1/045.NL9

ATTACHMENT 1

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Technical Specification	System	CURRENT		PROPOSED		% CHANGE IN RISK
		AOT (Days)	STI (Days)	AOT (Days)	STI (Days)	
3.7.6	Essential Cooling Water	3	N/C	10	N/C	23.8 (A)
3/4.7.7	Control Room HVAC	(1)	31	(2)	92	0.5
4.7.13	Electrical Auxiliary Building HVAC	N/C	12 Hours	N/C	24 Hours	*
3.7.14	Essential Chilled Water	3	N/C	10	N/C	0.7
3/4.8.1.1	Diesel Generators	(3)	N/C	(4)	N/C	24.8
3.8.2	DC Electrical Sources	(5)	N/C	(6)	N/C	1.6

NOTES:

N/C No Change proposed

- (1) 7 days for the first inoperable train of control room HVAC and 24 hours for the second train of three
- (2) 10 days for the first inoperable train of control room HVAC and 72 hours for the second train of three
- (3) 72 hours for the first inoperable standby diesel generator and 2 hours for the second diesel generator
- (4) 10 days for the first inoperable standby diesel generator and 12 hours for the second diesel generator
- (5) 24 hours for Channels I and IV battery chargers; and 2 hours for any battery and Channels II and III chargers

ATTACHMENT 1

ATTACHMENT 1
ST-HL-AS 3439
PAGE 3 OF 15

Table 1 Summary of Proposed Technical Specification Changes

NOTES (Cont.):

- (6) 72 hours for any battery charger and
24 hours for any battery
- Denotes that a qualitative analysis is performed
- (A) Includes a corresponding increase for all dependent systems
- (B) The reduction of risk indicated reflects a minor modeling change in
addition to the proposed Technical Specification Change

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ST-HL-AE-3283

PLANT SYSTEMS

AUXILIARY FEEDWATER SYSTEM

ATTACHMENT 1
ST-HL-AE- 3439
PAGE 5 OF 15

LIMITING CONDITION FOR OPERATION

3.7.1.2 At least four independent steam generator auxiliary feedwater pumps and associated flow paths shall be OPERABLE with:

- a. Three motor-driven auxiliary feedwater pumps, each capable of being powered from separate emergency busses, and
- b. One steam turbine-driven auxiliary feedwater pump capable of being powered from an OPERABLE steam supply system.

APPLICABILITY: MODES 1, 2, and 3.

ACTION:

- a. With the Train A motor-driven auxiliary feedwater pump inoperable, initiate corrective actions to restore the pump to OPERABLE status as soon as possible. The provisions of Specification 4.0.4 are not applicable.
- b. With any of the following ~~combinations of~~ auxiliary feedwater pumps inoperable:

- 1) Train B or Train C motor-driven pump, ~~or~~
- 2) Train D turbine-driven pump, ~~and any one motor-driven pump,~~
- 3) ~~Train A and either Train B or Train C motor-driven pump, or~~
- 4) ~~Train D turbine-driven pump~~

10 days Restore the affected auxiliary feedwater pump(s) to OPERABLE status within ~~72 hours~~ or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.

- c. With Train B and Train C motor driven pumps, or any three auxiliary feedwater pumps inoperable, be in at least HOT STANDBY within 6 hours and in HOT SHUTDOWN within the following 6 hours.
- d. With four auxiliary feedwater pumps inoperable, immediately initiate corrective action to restore at least one auxiliary feedwater pump to OPERABLE status as soon as possible.

SURVEILLANCE REQUIREMENTS

4.7.1.2.1 Each auxiliary feedwater pump shall be demonstrated OPERABLE:

- a. At least once per ~~30~~ 92 days on a STAGGERED TEST BASIS by:
 - 1) Verifying that each motor-driven pump develops a discharge pressure of greater than or equal to 1454 psig at a flow of greater than or equal to 540 gpm;
 - 2) Verifying that the steam turbine-driven pump develops a discharge pressure of greater than or equal to 1454 psig at a flow of greater than or equal to 540 gpm when the secondary steam supply pressure is greater than 1000 psig. The provisions of Specification 4.0.4 are not applicable for entry into MODE 3;

PLANT SYSTEMS

ATTACHMENT 1

ST-HL-AE 3439

PAGE 6 OF 15

SURVEILLANCE REQUIREMENTS (Continued)

- 3) Verifying that each non-automatic valve in the flow path that is not locked, sealed, or otherwise secured in position is in its correct position; and
 - 4) Verifying that each automatic valve in the flow path is in the correct position whenever the Auxiliary Feedwater System is placed in automatic control or when above 10% RATED THERMAL POWER.
- b. At least once per 18 months during shutdown by:
- 1) Verifying that each automatic valve in the flow path actuates to its correct position upon receipt of an Auxiliary Feedwater Actuation test signal, and
 - 2) Verifying that each auxiliary feedwater pump starts as designed automatically upon receipt of an Auxiliary Feedwater Actuation test signal.
 - 3) Verifying that each auxiliary feedwater flow regulating valve limits the flow to each steam generator between 550 gpm and 675 gpm.

4.7.1.2.2 An auxiliary feedwater flow path to each steam generator shall be demonstrated OPERABLE following each COLD SHUTDOWN of greater than 30 days prior to entering MODE 2 by verifying normal flow to each steam generator.

PLANT SYSTEMS3/4.7.4 ESSENTIAL COOLING WATER SYSTEM

ATTACHMENT

7 3439-15

LIMITING CONDITION FOR OPERATION

3.7.4 At least three independent essential cooling water loops shall be OPERABLE.

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

ACTION:

10 days

With only two essential cooling water loops OPERABLE, restore at least three loops to OPERABLE status within ~~20 days~~ or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.7.4 At least three essential cooling water loops shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying that each valve (manual, power-operated, or automatic) servicing safety-related equipment that is not locked, sealed, or otherwise secured in position is in its correct position;
- b. At least once per 18 months during shutdown, by verifying that:
 - 1) Each automatic valve servicing safety-related equipment actuates to its correct position on a Safety Injection, ECW pump start, screen wash booster pump start and essential chiller start test signals, as applicable,
 - 2) Each Essential Cooling Water pump starts automatically on a Safety Injection or a Loss of Offsite Power test signal, and
 - 3) Each screen wash booster pump and the traveling screen start automatically on a Safety Injection test signal.

3/4.8 ELECTRICAL POWER SYSTEMS3/4.8.1 A.C. SOURCESOPERATING

ATTACHMENT	1
ST-HL-AE-	3439
PAGE	8 OF 15

LIMITING CONDITION FOR OPERATION

3.8.1.1 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

- Two physically independent circuits between the offsite transmission network and the onsite Class 1E Distribution System^{**}, and
- Three separate and independent standby diesel generators, each with a separate fuel tank containing a minimum volume of 60,500 gallons of fuel.

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

ACTION:

- With one offsite circuit of the above-required A.C. electrical power sources inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirement 4.8.1.1.1.a within 1 hour, ~~and at least once per 8 hours thereafter~~. Demonstrate the OPERABILITY of each standby diesel generator that has not been successfully tested within the past 24 hours by performing Surveillance Requirement 4.8.1.1.2.a.2) for each such standby diesel generator, separately, within 24 hours. Restore the offsite circuit to OPERABLE status within ~~24 hours~~ or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
10 days
- With a standby diesel generator inoperable, demonstrate the OPERABILITY of the above-required A.C. offsite sources by performing Surveillance Requirement 4.8.1.1.1.a within 1 hour, ~~and at least once per 8 hours thereafter~~. If the standby diesel generator became inoperable due to any cause other than preplanned preventive maintenance or testing, demonstrate the OPERABILITY of the remaining OPERABLE standby diesel generators by performing Surveillance Requirement 4.8.1.1.2.a.2) ~~and~~ for each such standby diesel generator, separately, within 24 hours.* Restore the inoperable standby diesel generator to OPERABLE status within ~~24 hours~~ or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
10 days
- With one offsite circuit and one standby diesel generator of the above required A.C. electrical power sources inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Specification 4.8.1.1.1a. within 1 hour, ~~and at least once per 8 hours thereafter~~, and if the standby diesel generator became inoperable due to

*This test is required to be completed regardless of when the inoperable standby diesel generator is restored to OPERABILITY.

**Loss of one 13.8 kV Standby bus to 4.16 kV ESF bus line constitutes loss of one offsite source. Loss of two 13.8 kV Standby busses to 4.16 kV ESF bus lines constitutes loss of two ~~offsite~~ sources.

LIMITING CONDITION FOR OPERATIONACTION (Continued)

any cause other than preplanned ~~preventive~~ maintenance or testing, demonstrate the OPERABILITY of the remaining OPERABLE standby diesel generators by performing Surveillance Requirement 4.8.1.1.2a.2) within 8 hours^a; restore at least one of the inoperable sources to OPERABLE status within 12 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Restore at least two offsite circuits and three standby diesel generators to OPERABLE status within ~~24 hours~~ from the time of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. **10 days**

- d. With one standby diesel generator inoperable in addition to ACTION b. or c. above, verify that:

1. All required systems, subsystems, trains, components, and devices that depend on the remaining OPERABLE diesel generators as a source of emergency power are also OPERABLE, and
2. When in MODE 1, 2, or 3, the steam-driven auxiliary feedwater pump is OPERABLE.

If these conditions are not satisfied within ¹² hours be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

- e. With two of the above required offsite A.C. circuits inoperable, demonstrate the OPERABILITY of three standby diesel generators by performing the requirements of Specification 4.8.1.1.2a.2) within 8 hours unless the standby diesel generators are already operating; restore at least one of the inoperable offsite sources to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours. With only one offsite source restored, restore at least two offsite circuits to OPERABLE status within ~~24 hours~~ from time of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. **10 days**

- f. With two or three of the above required standby diesel generators inoperable, demonstrate the OPERABILITY of two offsite A.C. circuits by performing the requirements of Specification 4.8.1.1.1a. within 1 hour, ~~and at least once per 8 hours thereafter~~; restore at least two standby diesel generators to OPERABLE status within ~~2 hours~~ or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Restore at least three standby diesel generators to OPERABLE status within ~~24 hours~~ from time of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. **12**
10 days

^aThis test is required to be completed regardless of when the inoperable standby diesel generator is restored to OPERABILITY.

ELECTRICAL POWER SYSTEMS

ATTACHMENT
ST HL-AE- 3639
PAGE 10 OF 15

SURVEILLANCE REQUIREMENTS

4.8.1.1.1 Each of the above required independent circuits between the offsite transmission network and the On-site Class 1E Distribution System shall be:

- a. Determined OPERABLE at least once per 7 days by verifying correct breaker alignments, indicated power availability, and
- b. Demonstrated OPERABLE at least once per 18 months during shutdown by transferring the unit power supply from the normal circuit to each of the alternate circuits.

4.8.1.1.2 Each standby diesel generator shall be demonstrated OPERABLE:

- a. In accordance with the frequency specified in Table 4.8-1 on a STAGGERED TEST BASIS by:
 - 1) Verifying the fuel level in its associated fuel tank,
 - 2) Verifying the diesel starts from ambient condition and accelerates to 600 rpm (nominal) in less than or equal to 10 seconds.^a The generator voltage and frequency shall be 4160 ± 416 volts and 60 ± 1.2 Hz within 10 seconds^a after the start signal. The diesel generator shall be started for this test by using one of the following signals:
 - a) Manual, or
 - b) Simulated loss-of-offsite power by itself, or
 - c) Simulated loss-of-offsite power in conjunction with a Safety Injection test signal, or
 - d) A Safety Injection test signal by itself.
 - 3) Verifying the generator is synchronized, loaded to greater than or equal to 5500 kW in less than or equal to 10 minutes^a, and operates with a load greater than or equal to 5500 kW for at least 60 minutes, and
 - 4) Verifying the standby diesel generator is aligned to provide standby power to the associated emergency busses.

^aThese diesel generator starts from ambient conditions shall be performed only once per 184 days in these surveillance tests and all other engine starts for the purpose of this surveillance testing shall be preceded by an engine prelude period and/or other warmup procedures such as gradual loading (>150 sec) recommended by the manufacturer so that the mechanical stress and wear on the diesel engine is minimized.

SURVEILLANCE REQUIREMENTS (Continued)

- b. At least once per 31 days and after each operation of the diesel where the period of operation was greater than or equal to 1 hour by checking for and removing accumulated water from its associated fuel tank;
- c. By sampling new fuel oil in accordance with ASTM-D4057 prior to addition to storage tanks and:
 - 1) By verifying in accordance with the tests specified in ASTM-D975-81 prior to addition to the storage tanks that the sample has:
 - a) An API Gravity of within 0.3 degrees at 60°F, or a specific gravity of within 0.0016 at 60/60°F, when compared to the supplier's certificate, or an absolute specific gravity at 60/60°F of greater than or equal to 0.83 but less than or equal to 0.89, or an API gravity of greater than or equal to 27 degrees but less than or equal to 39 degrees;
 - b) A kinematic viscosity at 40°C of greater than or equal to 1.9 centistokes, but less than or equal to 4.1 centistokes if gravity was not determined by comparison with the supplier's certification;
 - c) A flash point equal to or greater than 125°F; and
 - d) A clear and bright appearance with proper color when tested in accordance with ASTM-D4176-82.
 - 2) By verifying within 30 days of obtaining the sample that the other properties specified in Table 1 of ASTM-D975-81 are met when tested in accordance with ASTM-D975-81 except that the analysis for sulfur may be performed in accordance with ASTM-D1552-79, ASTM-D2622-82, or ASTM-D4294-83.
- d. At least once every 31 days by obtaining a sample of fuel oil in accordance with ASTM-D2276-78, and verifying that total particulate contamination is less than 10 mg/liter when checked in accordance with ASTM-D2276-78, Method A;
- e. At least once per 18 months, during shutdown, by:
 - 1) Subjecting the diesel to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for this class of standby service;
 - 2) Verifying the generator capability to reject a load of greater than or equal to 785.3 kW while maintaining voltage at 4160 ± 416 volts and frequency at 60 ± 4.5 Hz;

ELECTRICAL POWER SYSTEMS

ATTACHMENT
ST-HL-AE
PAGE 12 OF 343915

SURVEILLANCE REQUIREMENTS (Continued)

- 3) Verifying the generator capability to reject a load of 5500 kW without tripping. The generator voltage shall not exceed 5262 volts during and following the load rejection;
- 4) Simulating a loss-of-offsite power by itself, and:
 - a) Verifying deenergization of the ESF busses and load shedding from the ESF busses, and
 - b) Verifying the diesel starts on the auto-start signal within 10 seconds, energizes the auto-connected shutdown loads through the load sequencer and operates for greater than or equal to 5 minutes while its generator is loaded with the shutdown loads. After energization, the steady-state voltage and frequency of the ESF busses shall be maintained at 4160 ± 416 volts and 60 ± 1.2 Hz during this test.
- 5) Verifying that on a Safety Injection test signal, without loss-of-offsite power, the diesel generator starts on the auto-start signal and operates on standby for greater than or equal to 5 minutes. The generator voltage and frequency shall be 4160 ± 416 volts and 60 ± 1.2 Hz within 10 seconds after the auto-start signal; the steady-state generator voltage and frequency shall be maintained within these limits during this test;
- 6) Simulating a loss-of-offsite power in conjunction with a Safety Injection test signal, and:
 - a) Verifying deenergization of the ESF busses and load shedding from the ESF busses;
 - b) Verifying the diesel starts on the auto-start signal within 10 seconds, energizes the auto-connected ESF (accident) loads through the load sequencer and operates for greater than or equal to 5 minutes while its generator is loaded with the ESF loads. After energization, the steady-state voltage and frequency of the ESF busses shall be maintained at 4160 ± 416 volts and 60 ± 1.2 Hz during this test; and
 - c) Verifying that all automatic diesel generator trips, except engine overspeed, generator differential, and low lube oil pressure are automatically bypassed upon loss of voltage on the ESF bus concurrent with a Safety Injection Actuation signal.
- 7) Verifying the standby diesel generator operates for at least 24 hours. During the first 2 hours of this test, the diesel

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- 13) Demonstrating the OPERABILITY of the automatic load shed bypass and the manual load shed reinstatement features of the load sequencer.
 - f. At least once per 10 years or after any modifications which could affect standby diesel generator interdependence by starting all standby diesel generators simultaneously, during shutdown, and verifying that all standby diesel generators accelerate to at least 600 rpm in less than or equal to 10 seconds; and
 - g. At least once per 10 years by:
 - 1) Draining each fuel tank, removing the accumulated sediment and cleaning the tank using a sodium hypochlorite solution, or equivalent, and
 - 2) Performing a pressure test of those portions of the diesel fuel oil system designed to Section III, subsection ND of the ASME Code at a test pressure equal to 110% of the system design pressure.
- 4.8.1.2.3 Reports - All standby diesel generator failures, valid or nonvalid, shall be reported to the Commission in a Special Report pursuant to Specification 6.9.2 within 30 days. Reports of standby diesel generator failures shall include the information recommended in Regulatory Position C.3.b of Regulatory Guide 1.108, Revision 1, August 1977. If the number of failures in the last 100 valid tests (on a per nuclear unit basis) is greater than or equal to 7, the report shall be supplemented to include the additional information recommended in Regulatory Position C.3.b of Regulatory Guide 1.108, Revision 1, August 1977.

Table 4.8-1

DIESEL GENERATOR TEST SCHEDULE

<u>NUMBER OF FAILURES IN LAST 20 VALID TESTS*</u>	<u>NUMBER OF FAILURES IN LAST 100 VALID TESTS*</u>	<u>TEST FREQUENCY</u>
≤ 1	≤ 4	Once per 31 days
$\geq 2^{**}$	≥ 5	Once per 7 days

* Criteria for determining number of failures and number of valid tests shall be in accordance with Regulatory Position C.2.e of Regulatory Guide 1.108, but determined on a per diesel generator basis.

For the purpose of determining the required test frequency, the previous test failure count may be reduced to zero if a complete diesel overhaul to like-new condition is completed, provided that the overhaul, including appropriate post-maintenance operation and testing, is specifically approved by the manufacturer and if acceptable reliability has been demonstrated. The reliability criterion shall be the successful completion of 14 consecutive tests in a single series. Ten of these tests shall be in accordance with the routine Surveillance Requirements 4.8.1.1.2.a.2 and 4.8.1.1.2.a.3 and four tests in accordance with the 180-day testing requirement of Surveillance Requirements 4.8.1.1.2.a.2 and 4.8.1.1.2.a.3. If this criterion is not satisfied during the first series of tests, any alternate criterion to be used to transvalue the failure count to zero requires NRC approval.

**The associated test frequency shall be maintained until seven consecutive failure free demands have been performed and the number of failures in the last 20 valid demands has been reduced to one.

ELECTRICAL POWER SYSTEMS

3/4.8.2 D.C. SOURCES

OPERATING

LIMITING CONDITION FOR OPERATION

3.8.2.1 As a minimum, the following D.C. electrical sources shall be OPERABLE:

- a. Channel I 125-volt Battery Bank E1A11 (Unit 1), E2A11 (Unit 2) and its two associated chargers,
- b. Channel II 125-volt Battery Bank E1D11 (Unit 1), E2D11 (Unit 2) and its associated full capacity charger,
- c. Channel III 125-volt Battery Bank E1B11 (Unit 1), E2B11 (Unit 2) and its associated full capacity charger, and
- d. Channel IV 125-volt Battery Bank E1C11 (Unit 1), E2C11 (Unit 2) and its two associated chargers.

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

ACTION:

- a. With one of the required battery banks, ~~and/or one of the required chargers for the Channels II or III inoperable~~, restore the inoperable battery bank ~~and/or charger~~ to OPERABLE status within ~~2 hours~~ or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
 24 hours
- b. With only one charger on Channel I ^{I, II, III, IV} or IV OPERABLE, demonstrate the OPERABILITY of the associated battery bank by performing Surveillance Requirement 4.8.2.1.a.1) within ~~2 hours~~ **8 hours** ~~and at least once per 6 hours thereafter~~. If any Category A limit in Table 4.8-2 is not met, declare the battery inoperable. Restore the inoperable charger to OPERABLE status within ~~24 hours~~ **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

4.8.2.1 Each 125-volt battery bank and charger shall be demonstrated OPERABLE:

- a. At least once per 7 days by verifying that:
 - 1) The parameters in Table 4.8-2 meet the Category A limits, and
 - 2) The total battery terminal voltage is greater than or equal to 129 volts on float charge.