

FINAL SUBMITTAL

V. C. SUMMER NUCLEAR STATION

**EXAM NO. 50-395/2000-301
AUGUST 7 - 11, 2000**

FINAL SRO LICENSE EXAM

REFERENCE MATERIAL

2.0 Operating Limits

The cycle-specific parameter limits for the specifications listed in Section 1.0 are presented in the subsections which follow. These limits have been developed using the NRC-approved methodologies specified in Technical Specification 6.9.1.11.

2.1 Moderator Temperature Coefficient (Specification 3.1.1.3):

2.1.1 The Moderator Temperature Coefficient (MTC) limits are:

The BOL/ARO-MTC shall be less positive than the limits shown in Figure 1.

The EOL/ARO/RTP-MTC shall be less negative than $-5 \times 10^{-4} \Delta k/k/^\circ F$.

2.1.2 The MTC Surveillance limit is:

The 300 ppm/ARO/RTP-MTC should be less negative than or equal to $-4.1 \times 10^{-4} \Delta k/k/^\circ F$

where: BOL stands for Beginning of Cycle Life

ARO stands for All Rods Out

RTP stands for RATED THERMAL POWER

EOL stands for End of Cycle Life

2.2 Shutdown Rod Insertion Limits (Specification 3.1.3.5):

The shutdown rods shall be withdrawn to at least 228 steps.

2.3 Control Rod Insertion Limits (Specification 3.1.3.6):

The Control Bank Insertion Limits are specified by Figure 2.

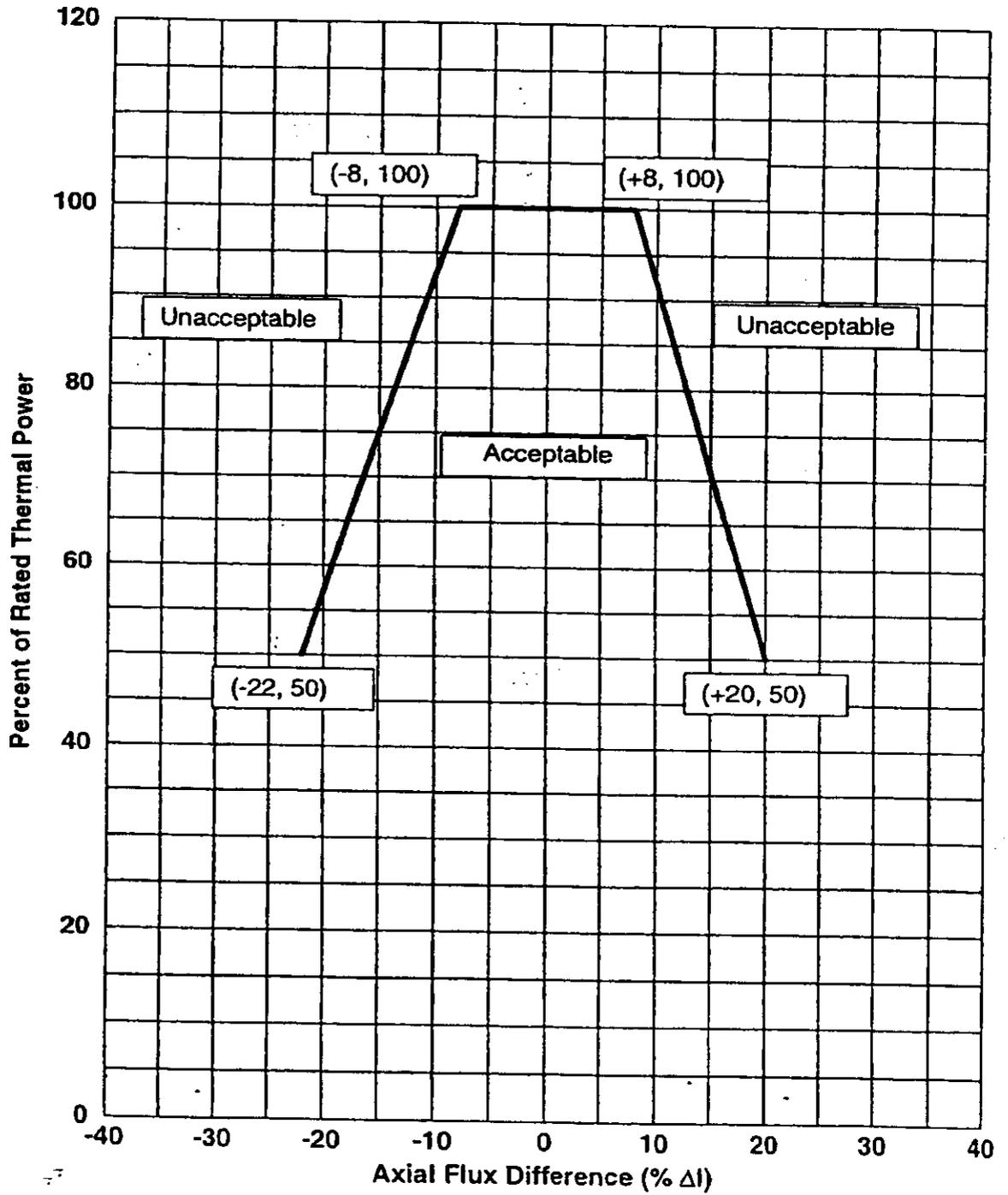
2.4 Axial Flux Difference (Specification 3.2.1):

2.4.1 The Axial Flux Difference (AFD) Limits for RAOC operation for Cycle 12 are shown in Figure 3.

2.4.2 The Axial Flux Difference (AFD) target band during base load operations for Cycle 12 is:
BOL - EOL (0 - 23,320 MWD/MTU): $\pm 5\%$ about a measured target value.

2.4.3 The minimum allowable power level for base load operation, APL^{ND} , is 85% of RATED THERMAL POWER.

Figure 3. Axial Flux Difference Limits as a Function of Rated Thermal Power
V. C. Summer - Cycle 12



3/4.2 POWER DISTRIBUTION LIMITS

3/4.2.1 AXIAL FLUX DIFFERENCE (AFD)

LIMITING CONDITION FOR OPERATION

3.2.1 The indicated AXIAL FLUX DIFFERENCE (AFD) shall be maintained within:

- a. the allowed operational space as specified in the CORE OPERATING LIMITS REPORT (COLR) for Relaxed Axial Offset Control (RAOC) operation, or
- b. within the target band specified in the COLR about the target flux difference during base load operation.

APPLICABILITY: MODE 1 above 50% of RATED THERMAL POWER*.

ACTION:

- a. For RAOC operation with the indicated AFD outside of the applicable limits specified in the COLR,
 1. Either restore the indicated AFD to within the COLR specified limits within 15 minutes, or
 2. Reduce THERMAL POWER to less than 50% of RATED THERMAL POWER within 30 minutes and reduce the Power Range Neutron Flux - High Trip setpoints to less than or equal 55% of RATED THERMAL POWER within the next 4 hours.
- b. For Base Load operation above APL^{ND**} with the indicated AFD outside of the applicable target band about the target flux differences:
 1. Either restore the indicated AFD to within the COLR specified target band within 15 minutes, or
 2. Reduce THERMAL POWER to less than APL^{ND} of RATED THERMAL POWER and discontinue Base Load operation within 30 minutes.
- c. THERMAL POWER shall not be increased above 50% of RATED THERMAL POWER unless the indicated AFD is within the applicable RAOC limits.

*See Special Test Exception 3.10.2

** APL^{ND} is the minimum allowable power level for base load operation and will be specified in the CORE OPERATING LIMITS REPORT per Specification 6.9.1.11.

POWER DISTRIBUTION LIMITS

SURVEILLANCE REQUIREMENTS

4.2.1.1 The indicated AFD shall be determined to be within its limits during POWER OPERATION above 50% of RATED THERMAL POWER by:

- a. Monitoring the indicated AFD for each OPERABLE excore channel at least once per 7 days when the AFD Monitor Alarm is OPERABLE:
- b. Monitoring and logging the indicated AFD for each OPERABLE excore channel at least once per hour for the first 24 hours and at least once per 30 minutes thereafter, when the AFD Monitor Alarm is inoperable. The logged values of the indicated AFD shall be assumed to exist during the interval preceding each logging.

4.2.1.2 The indicated AFD shall be considered outside of its limits when two or more OPERABLE excore channels are indicating the AFD to be outside the limits.

4.2.1.3 When in Base Load operation, the target flux difference of each OPERABLE excore channel shall be determined by measurement at least once per 92 Effective Full Power Days. The provisions of Specification 4.0.4 are not applicable.

4.2.1.4 When in Base Load operation, the target flux difference shall be updated at least once per 31 Effective Full Power Days by either determining the target flux difference in conjunction with the surveillance requirements of Specification 4.2.1.3 above or by linear interpolation between the most recently measured value and the calculated value at the end of cycle life. The provisions of Specification 4.0.4 are not applicable.

POWER DISTRIBUTION LIMITS

3/4.2.4 QUADRANT POWER TILT RATIO

LIMITING CONDITION FOR OPERATION

3.2.4 The QUADRANT POWER TILT RATIO shall not exceed 1.02.

APPLICABILITY: MODE 1 above 50% of RATED THERMAL POWER*

ACTION:

- a. With the QUADRANT POWER TILT RATIO determined to exceed 1.02 but less than or equal to 1.09:
 1. Calculate the QUADRANT POWER TILT RATIO at least once per hour until either:
 - a) The QUADRANT POWER TILT RATIO is reduced to within its limit, or
 - b) THERMAL POWER is reduced to less than 50% of RATED THERMAL POWER.
 2. Within 2 hours either:
 - a) Reduce the QUADRANT POWER TILT RATIO to within its limit, or
 - b) Reduce THERMAL POWER at least 3% from RATED THERMAL POWER for each 1% of indicated QUADRANT POWER TILT RATIO in excess of 1.0 and similarly reduce the Power Range Neutron Flux-High Trip Setpoints within the next 4 hours.
 3. Verify that the QUADRANT POWER TILT RATIO is within its limit within 24 hours after exceeding the limit or reduce THERMAL POWER to less than 50% of RATED THERMAL POWER within the next 2 hours and reduce the Power Range Neutron Flux-High Trip setpoints to less than or equal to 55% of RATED THERMAL POWER within the next 4 hours.
 4. Identify and correct the cause of the out of limit condition prior to increasing THERMAL POWER; subsequent POWER OPERATION above 50% of RATED THERMAL power may proceed provided that the QUADRANT POWER TILT RATIO is verified within its limit at least once per hour for 12 hours or until verified acceptable at 95% or greater RATED THERMAL POWER.

*See Special Test Exception 3.10.2.

POWER DISTRIBUTION LIMITS

ACTION: (Continued)

- b. With the QUADRANT POWER TILT RATIO determined to exceed 1.09 due to misalignment of either a shutdown or control rod:
 1. Calculate the QUADRANT POWER TILT RATIO at least once per hour until either:
 - a) The QUADRANT POWER TILT RATIO is reduced to within its limit,
or
 - b) THERMAL POWER is reduced to less than 50% of RATED THERMAL POWER.
 2. Reduce THERMAL POWER at least 3% from RATED THERMAL POWER for each 1% of indicated QUADRANT POWER TILT RATIO in excess of 1.0, within 30 minutes.
 3. Verify that the QUADRANT POWER TILT RATIO is within its limit within 2 hours after exceeding the limit or reduce THERMAL POWER to less than 50% of RATED THERMAL POWER within the next 2 hours and reduce the Power Range Neutron Flux-High trip Setpoints to less than or equal to 55% of RATED THERMAL POWER within the next 4 hours.
 4. Identify and correct the cause of the out of limit condition prior to increasing THERMAL POWER; subsequent POWER OPERATION above 50% of RATED THERMAL POWER may proceed provided that the QUADRANT POWER TILT RATIO is verified within its limit at least once per hour for 12 hours or until verified acceptable at 95% or greater RATED THERMAL POWER.
- c. With the QUADRANT POWER TILT RATIO determined to exceed 1.09 due to causes other than the misalignment of either a shutdown or control rod:
 1. Calculate the QUADRANT POWER TILT RATIO at least once per hour until either:
 - a) The QUADRANT POWER TILT RATIO is reduced to within its limit,
or
 - b) THERMAL POWER is reduced to less than 50% of RATED THERMAL POWER.

POWER DISTRIBUTION LIMITS

LIMITING CONDITION FOR OPERATION

ACTION: (Continued)

2. Reduce THERMAL POWER to less than 50% of RATED THERMAL POWER within 2 hours and reduce the Power Range Neutron Flux-High Trip Setpoints to less than or equal to 55% of RATED THERMAL POWER within the next 4 hours.
 3. Identify and correct the cause of the out of limit condition prior to increasing THERMAL POWER; subsequent POWER OPERATION above 50% of RATED THERMAL POWER may proceed provided that the QUADRANT POWER TILT RATIO is verified within its limit at least once per hour for 12 hours or until verified at 95% or greater RATED THERMAL POWER.
- d. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.2.4.1 The QUADRANT POWER TILT RATIO shall be determined to be within the limit above 50% of RATED THERMAL POWER by:

- a. Calculating the ratio at least once per 7 days when the alarm is OPERABLE.
- b. Calculating the ratio at least once per 12 hours during steady state operation when the alarm is inoperable.

4.2.4.2 The QUADRANT POWER TILT RATIO shall be determined to be within the limit when above 75 percent of RATED THERMAL POWER with one Power Range Channel inoperable by using the movable incore detectors to confirm that the normalized symmetric power distribution, obtained from 2 sets of 4 symmetric thimble locations or a core power distribution measurement, is consistent with the indicated QUADRANT POWER TILT RATIO at least once per 12 hours.

EMERGENCY CORE COOLING SYSTEMS

3/4.5.2 ECCS SUBSYSTEMS - $T_{avg} \geq 350^{\circ}\text{F}$

LIMITING CONDITION FOR OPERATION

3.5.2 Two independent Emergency Core Cooling System (ECCS) subsystems* shall be OPERABLE with each subsystem comprised of:

- a. One OPERABLE centrifugal charging pump,
- b. One OPERABLE residual heat removal heat exchanger,
- c. One OPERABLE residual heat removal pump, and
- d. An OPERABLE flow path capable of taking suction from the refueling water storage tank on a safety injection signal and automatically transferring suction to the residual heat removal sump during the recirculation phase of operation.

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

- a. With one ECCS subsystem inoperable, restore the inoperable subsystem 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.
- b. In the event the ECCS is actuated and injects water into the Reactor Coolant System, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 90 days describing the circumstances of the actuation and the total accumulated actuation cycles to date. The current value of the usage factor for each affected safety injection nozzle shall be provided in this Special Report whenever its value exceeds 0.70.

* The allowable outage time for each RHR train may be extended to 7 days for the purpose of maintenance and modification. This exception may only be used one time per RHR train and is not valid after December 31, 1997.

EMERGENCY CORE COOLING SYSTEMS

SURVEILLANCE REQUIREMENTS

4.5.2 Each ECCS subsystem shall be demonstrated OPERABLE:

- a. At least once per 12 hours by verifying that the following valves are in the indicated positions with power to the valve operators removed:

	<u>Valve Number</u>	<u>Valve Function</u>	<u>Valve Position</u>
1.	8884	HHSI Hot Leg Injection	Closed
2.	8886	HHSI Hot Leg Injection	Closed
3.	8888A	LHSI Cold Leg Injection	Open
4.	8888B	LHSI Cold Leg Injection	Open
5.	8889	LHSI Hot Leg Injection	Closed
6.	8701A	RHR Inlet	Closed
7.	8701B	RHR Inlet	Closed
8.	8702A	RHR Inlet	Closed
9.	8702B	RHR Inlet	Closed
10.	8133A	Charging/HHSI Cross-Connect	Open
11.	8133B	Charging/HHSI Cross-Connect	Open
12.	8106	Charging Mini-Flow Header Isolation	Open

- b. At least once per 31 days by:

1. Verifying that each valve (manual, power operated or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position, and
2. Verifying that the ECCS piping is full of water by venting the ECCS pump casings and accessible discharge piping high points.

- c. By a visual inspection which verifies that no loose debris (rags, trash, clothing, etc.) is present in the reactor building which could be transported to the RHR and Spray Recirculation sumps and cause restriction of the pump suction during LOCA conditions. This visual inspection shall be performed:

1. For all accessible areas of the reactor building prior to establishing CONTAINMENT INTEGRITY, and
2. Of the areas affected within the reactor building at the completion of each reactor building entry when CONTAINMENT INTEGRITY is established.

- d. At least once per 18 months by:

1. Verifying automatic interlock action of the RHR system from the Reactor Coolant System by ensuring that, with a simulated or actual Reactor Coolant System pressure signal greater than or equal to 425 psig, the interlocks prevent the valves from being opened.

EMERGENCY CORE COOLING SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

2. A visual inspection of the containment sump and verifying that the subsystem suction inlets are not restricted by debris and that the sump components (trash racks, screens, etc.) show no evidence of structural distress or abnormal corrosion.
- e. At least once per 18 months, during shutdown, by:
 1. Verifying that each automatic valve in the flow path actuates to its correct position on a safety injection actuation and containment sump recirculation test signal.
 2. Verifying that each of the following pumps start automatically upon receipt of a safety injection actuation test signal:
 - a) Centrifugal charging pump
 - b) Residual heat removal pump
- f. By verifying each ECCS pump's developed head at the test flow point for that pump is greater than or equal to the required developed head in accordance with Specification 4.0.5.
- g. By verifying the correct position of each mechanical position stop for the following ECCS throttle valves:
 1. Within 4 hours following completion of each valve stroking operation or maintenance on the valve when the ECCS subsystems are required to be OPERABLE.
 2. At least once per 18 months.

HPSI System Valve Number

- a. 8996A
- b. 8996B
- c. 8996C
- d. 8994A
- e. 8994B
- f. 8994C
- g. 8989A
- h. 8989B
- i. 8989C
- j. 8991A
- k. 8991B
- l. 8991C

CONTAINMENT SYSTEMS

CONTAINMENT AIR LOCKS

LIMITING CONDITION FOR OPERATION

3.6.1.3 Each reactor building air lock shall be OPERABLE with both doors closed except when the air lock is being used for normal transit entry and exit through the containment, then at least one air lock door shall be closed.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- a. With one reactor building air lock door inoperable:
 1. Maintain at least the OPERABLE air lock door closed and either restore the inoperable air lock door to OPERABLE status within 24 hours or lock the OPERABLE air lock door closed.
 2. Operation may then continue until performance of the next required overall air lock leakage test provided that the OPERABLE air lock door is verified to be locked closed at least once per 31 days.
 3. Otherwise, be in at least HOT STANDBY within the next six hours and in COLD SHUTDOWN within the following 30 hours.
 4. The provisions of Specification 3.0.4 are not applicable.
- b. With the reactor building air lock inoperable, except as the result of an inoperable air lock door, maintain at least one air lock door closed; restore the inoperable air lock to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next six hours and in COLD SHUTDOWN within the following 30 hours.

CONTAINMENT SYSTEMS

REACTOR BUILDING COOLING SYSTEM

LIMITING CONDITIONS FOR OPERATION

3.6.2.3 Two independent groups of reactor building cooling units shall be OPERABLE with at least one of two cooling units OPERABLE in slow speed in each group.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- a. With one group of the above required reactor building cooling units inoperable and both reactor building spray systems OPERABLE, restore the inoperable group of cooling units 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.
- b. With two groups of the above required reactor building cooling units inoperable, and both reactor building spray systems OPERABLE, restore at least one group of cooling units 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. Restore both above required groups of cooling units to OPERABLE status within 7 days of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. With one group of the above required reactor building cooling units inoperable and one reactor building spray system inoperable, restore the inoperable spray system 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. Restore the inoperable group of containment cooling units to OPERABLE status within 7 days of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.2.3 Each group of reactor building cooling units shall be demonstrated OPERABLE:

- a. At least once per 31 days by:
 1. Starting each cooling unit group from the control room, and verifying that each cooling unit group operates for at least 15 minutes in the slow speed mode.
- b. At least once per 18 months by:
 1. Verifying that each fan group starts automatically on a safety injection test signal.
 2. Verifying a cooling water flow rate of greater than or equal to 2,000 gpm to each cooling unit group.

PLANT SYSTEMS

EMERGENCY FEEDWATER SYSTEM

LIMITING CONDITION FOR OPERATION

3 7.1.2 At least three independent steam generator emergency feedwater pumps and flow paths shall be OPERABLE with:

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

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

- a. With one emergency feedwater pump inoperable, restore the required emergency feedwater pumps 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.
- b. With two emergency feedwater pumps inoperable, be in at least HOT STANDBY within 6 hours and in HOT SHUTDOWN within the following 6 hours.
- c. With three emergency feedwater pumps inoperable, immediately initiate corrective action to restore at least one emergency feedwater pump to OPERABLE status as soon as possible.

SURVEILLANCE REQUIREMENTS

4.7.1.2 Each emergency feedwater pump shall be demonstrated OPERABLE:

- a. At least once per 31 days by:
 1. Verifying that each motor driven pump develops a discharge pressure of greater than or equal to 1600 psig at greater than or equal to 90 gpm flow.
 2. Verifying that the steam turbine driven pump develops a discharge pressure of greater than or equal to 1330 psig at a flow of greater than or equal to 97 gpm when the secondary steam supply pressure is greater than 865 psig. The provisions of Specification 4.0.4 are not applicable.
 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.

ELECTRICAL POWER SYSTEMS

3/4.8.3 ONSITE POWER DISTRIBUTION

OPERATING

LIMITING CONDITION FOR OPERATION

3.8.3.1 The following electrical busses shall be energized in the specified manner with tie breakers open between redundant busses:

- a. Train A A.C. Emergency Busses consisting of:
 1. 7200 volt Emergency Busses # 1DA and 1EA.
 2. 480 volt Emergency Busses # 1DA1, 1DA2 and 1EA1.
- b. Train B A.C. Emergency Busses consisting of:
 1. 7200 volt Emergency Busses # 1DB and 1EB.
 2. 480 volt Emergency Busses # 1DB1, 1DB2, and 1EB1.
- c. 120 volt A.C. Vital Busses # 5902 and 5901 energized from an associated inverter connected to D.C. Bus # 1HA*.
- d. 120 volt A.C. Vital Busses # 5904 and 5903 energized from an associated inverter connected to D.C. Bus # 1HB*.
- e. 120 volt A.C. Vital Bus #5907 energized.
- f. 120 volt A.C. Vital Bus #5908 energized.
- g. 125 volt D.C. Bus 1HA energized from Battery Bank #1A.
- h. 125 volt D.C. Bus 1HB energized from Battery Bank #1B.

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

ACTION:

- a. With one of the required trains of A.C. Emergency busses not fully energized, re-energize the division within 8 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With one A.C. Vital Bus not energized, re-energize the A.C. Vital Bus within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. With one of A.C. Vital Busses #5901, 5902, 5903, or 5904 either not energized from its associated inverter, or with the inverter not connected to its associated D.C. Bus re-energize the A.C. Vital Bus from its associated inverter connected to its associated D.C. Bus within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

* The inverters may be disconnected from their D.C. Bus for up to 24 hours as necessary for the purpose of performing an equalizing charge on their associated battery bank provided (1) their vital busses are energized, and (2) the vital busses associated with the other battery bank are energized from their associated inverters and connected to their associated D.C. Bus.

ELECTRICAL POWER SYSTEMS

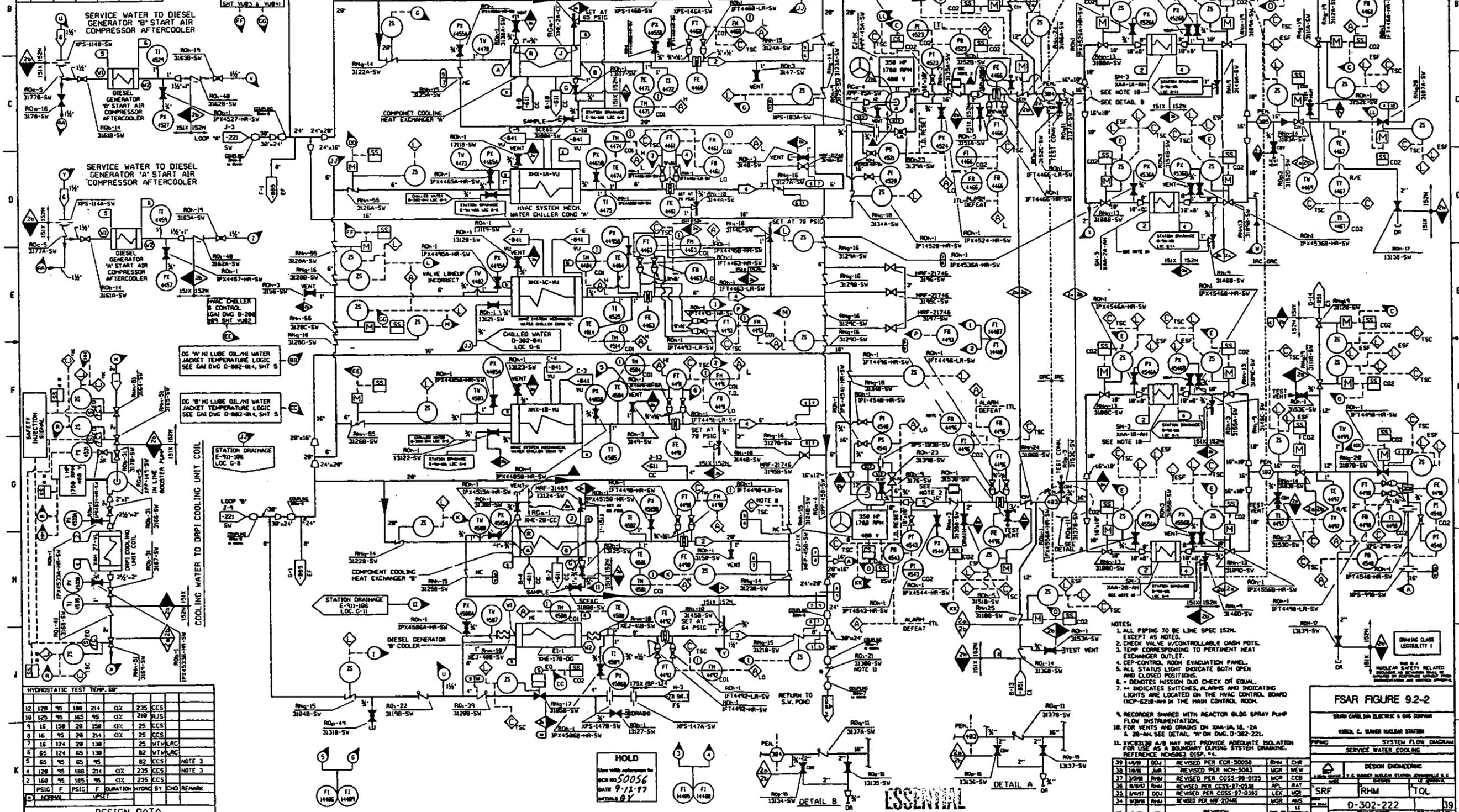
ACTION: (Continued)

- d. With one D.C. bus not energized from its associated Battery Bank, re-energize the D.C. bus from its associated Battery Bank within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.8.3.1 The specified busses shall be determined energized in the required manner at least once per 7 days by verifying correct breaker alignment and indicated voltage on the busses.

SYSTEM DATA					
LINE	QPH	PSIG	T	BY	REMARKS
1	35	50	85	JJV	NORMAL
2	1000	50	95		NORMAL
3	7700	50	130		POST ACCID
4	1000	50	95		NORMAL
5	820	50	116		POST ACCID
6	1000	45	85		NORMAL
7	500	45	85		POST ACCID
8	2000	150	95		NORMAL
9	20	50	95	JJV	NORMAL
10	20	50	95	JJV	POST ACCID
11					NORMAL



HYDROSTATIC TEST TEMP. 60°							
LINE	QPH	PSIG	T	BY	REMARKS		
12	120	95	180	214	012	235	CCS
13	120	95	165	95	012	210	RJS
14	150	20	150	012	25	CCS	
15	16	95	20	214	012	25	CCS
16	124	85	130		25	VTL/AC	
17	85	124	85	130		82	CCS
18	85	95	85	95		82	CCS
19	120	95	180	214	012	235	CCS
20	160	95	185	95	012	235	CCS

DESIGN DATA					
PSIG	F	PSIG	F	PSIG	F
120	95	160	95	120	95
150	20	150	20	150	20
180	214	180	214	180	214
210	012	210	012	210	012
235	CCS	235	CCS	235	CCS
25	CCS	25	CCS	25	CCS
82	CCS	82	CCS	82	CCS

NOTES:

- ALL PIPING TO BE LINE SPEC 152N UNLESS NOTED OTHERWISE.
- CHECK VALVE W/CONTROLLABLE DASH POTS.
- TEMP CORRESPONDING TO PERTINENT HEAT EXCHANGER OUTLET.
- CEP-CONTROL ROOM EVACUATION PANEL.
- ALL STATUS LIGHT INDICATE BOTH OPEN AND CLOSED POSITIONS.
- IDENTIFIES MESSIAH DASH CHECK OF EQUAL.
- INDICATES SWITCHES, ALARMS AND INDICATING LIGHTS ARE LOCATED ON THE HVAC CONTROL BOARD (CCP-6218-00) IN THE MAIN CONTROL ROOM.
- RECORDED SHARED WITH REACTOR BLDG SPRAY PUMP FLOW INSTRUMENTATION.
- FOR VENTS AND DRAINS ON XAA-1A, 1B, 2A & 2B-00A. SEE DETAIL 'W' ON DWG. D-302-221.
- HYDROSTATIC TEST MAY NOT PROVIDE ADEQUATE ISOLATION FOR USE AS A BOUNDARY DURING SYSTEM DRAINING. REFERENCE DRAWING D-302-221.

FSAR FIGURE 92-2

SYSTEM FLOW DIAGRAM
SERVICE WATER COOLING

DESIGN ENGINEERING
VIRGIL C. SMITH NUCLEAR SYSTEMS
DATE: 9-13-77

REVISIONS:

NO.	DATE	BY	REVISION
1	9-13-77	JJV	ISSUED FOR CONSTRUCTION
2	10-10-77	JJV	REVISED PER ECR-50058
3	11-10-77	JJV	REVISED PER ECR-50058
4	12-10-77	JJV	REVISED PER ECR-50058
5	1-10-78	JJV	REVISED PER ECR-50058
6	2-10-78	JJV	REVISED PER ECR-50058
7	3-10-78	JJV	REVISED PER ECR-50058
8	4-10-78	JJV	REVISED PER ECR-50058
9	5-10-78	JJV	REVISED PER ECR-50058
10	6-10-78	JJV	REVISED PER ECR-50058
11	7-10-78	JJV	REVISED PER ECR-50058
12	8-10-78	JJV	REVISED PER ECR-50058
13	9-10-78	JJV	REVISED PER ECR-50058
14	10-10-78	JJV	REVISED PER ECR-50058
15	11-10-78	JJV	REVISED PER ECR-50058
16	12-10-78	JJV	REVISED PER ECR-50058
17	1-10-79	JJV	REVISED PER ECR-50058
18	2-10-79	JJV	REVISED PER ECR-50058
19	3-10-79	JJV	REVISED PER ECR-50058
20	4-10-79	JJV	REVISED PER ECR-50058
21	5-10-79	JJV	REVISED PER ECR-50058
22	6-10-79	JJV	REVISED PER ECR-50058
23	7-10-79	JJV	REVISED PER ECR-50058
24	8-10-79	JJV	REVISED PER ECR-50058
25	9-10-79	JJV	REVISED PER ECR-50058
26	10-10-79	JJV	REVISED PER ECR-50058
27	11-10-79	JJV	REVISED PER ECR-50058
28	12-10-79	JJV	REVISED PER ECR-50058
29	1-10-80	JJV	REVISED PER ECR-50058
30	2-10-80	JJV	REVISED PER ECR-50058
31	3-10-80	JJV	REVISED PER ECR-50058
32	4-10-80	JJV	REVISED PER ECR-50058
33	5-10-80	JJV	REVISED PER ECR-50058
34	6-10-80	JJV	REVISED PER ECR-50058
35	7-10-80	JJV	REVISED PER ECR-50058
36	8-10-80	JJV	REVISED PER ECR-50058
37	9-10-80	JJV	REVISED PER ECR-50058
38	10-10-80	JJV	REVISED PER ECR-50058
39	11-10-80	JJV	REVISED PER ECR-50058
40	12-10-80	JJV	REVISED PER ECR-50058

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