ENCLOSURE I

Consists of pages numbered 3-6 through 3-10 and 4-7 through 4-12.

ENCLOSURE I

3.1.2 OPERATIONAL COMPONENTS

APPLICABILITY: Applies to the operating status of the reactor coolant system equipment and related equipment. For the applicable surveillance requirements, see Table 4.1.2.

OBJECTIVE: To identify those conditions of the reactor coolant system necessary to ensure safe reactor operation.

SPECIFICATIONS:

A. At least one pressurizer safety valve shall be operable or open when the reactor head is on the vessel, except for hydrostatic tests.

B. The reactor shall not be made critical or maintained critical unless both pressurizer safety valves are operable.

C. During Modes 1 and 2, all three reactor coolant loops and their associated steam generators and reactor coolant pumps shall be in operation. With less than the above required coolant loops in operation, be in at least Hot Standby within 1 hour, except as modified by Specification D below.

D. The limitations of Specification C may be suspended during Modes 1 and 2 as follows:

   1. Operation may be conducted with 0, 1, 2 or 3 reactor coolant pumps operating during low power physics testing at less than 5% of full power.

   2. Whenever reactor power is less than 10% of full power, operation with one or two reactor coolant pumps operating shall be limited to less than 24 consecutive hours.

E. During Mode 3, the following specifications shall apply:

   1. At least two of the reactor coolant loops listed below shall be operable:

      a. Reactor coolant loop A and its associated steam generator and reactor coolant pump.

      b. Reactor coolant loop B and its associated steam generator and reactor coolant pump.

      c. Reactor coolant loop C and its associated steam generator and reactor coolant pump.

2. At least one of the above reactor coolant loops shall be in operation.*

3. With less than the above required reactor coolant loops operable, restore the required loops to operable status within 72 hours or be in Hot Shutdown within the next 12 hours.

4. With no reactor coolant loop in operation, suspend all operations involving a reduction in boron concentration of the reactor coolant system and immediately initiate corrective action to return the required reactor coolant loop to operation.

F. During Mode 4, the following specifications shall apply:

1. At least two of the reactor coolant loops/residual heat removal (RHR) trains listed below shall be operable:

    a. Reactor coolant loop A and its associated steam generator and reactor coolant pump.

    b. Reactor coolant loop B and its associated steam generator and reactor coolant pump.

    c. Reactor coolant loop C and its associated steam generator and reactor coolant pump.

    d. Residual heat removal (RHR) pump G-14A and one associated RHR train.

    e. Residual heat removal (RHR) pump G-14B and one associated RHR train.

2. At least one of the above loops/trains shall be in operation.**

3. With less than the above required loops/trains operable immediately initiate corrective action to return the required loops/trains to operable status as soon as possible; if the remaining operable loop/train is an RHR train, be in Cold Shutdown within 24 hours.

* All reactor coolant pumps may be de-energized for up to one hour provided (a) no operations are permitted that would cause dilution of the reactor coolant system boron concentration, and (b) core outlet temperature is maintained at least 40°F below saturation temperature.

** All reactor coolant pumps and residual heat removal pumps may be de-energized for up to one hour provided (a) no operations are permitted that would cause dilution of the reactor coolant system boron concentration, and (b) core outlet temperature is maintained at least 40°F below saturation temperature.

4. With no loop or train in operation, suspend all operations involving a reduction in boron concentration of the reactor coolant system and immediately initiate corrective action to return one required loop or train to operation.

G. During Mode 5 with reactor coolant loops filled, the following specifications shall apply:

1. At least one residual heat removal (RHR) train shall be operable and in operation,* and either

   a. One additional RHR train shall be operable,** or

   b. The secondary side water level of at least two steam generators shall be greater than or equal to 256 inches of narrow range on cold calibrated scale.

2. With less than the above required loops/trains operable, or with less than the required steam generator level, immediately initiate corrective action to return the required loops/trains to operable status or to restore the required level as soon as possible.

3. With no RHR train in operation, suspend all operations involving a reduction in boron concentration of the reactor coolant system and immediately initiate corrective action to return the required RHR train to operation.

H. During Mode 5 with reactor coolant loops not filled, the following specifications shall apply:

1. Two residual heat removal (RHR) trains shall be operable** and at least one RHR train shall be in operation.*

2. With less than the above required RHR trains operable, immediately initiate corrective action to return the required RHR trains to operable status as soon as possible.

* The RHR pump may be de-energized for up to one hour provided (a) no operations are permitted that would cause dilution of the reactor coolant system boron concentration, and (b) core outlet temperature is maintained at least 40°F below saturation temperature.

** One RHR train may be inoperable for up to 2 hours for surveillance testing, provided the other RHR train is operable and in operation.

3. With no RHR train in operation, suspend all operations involving a reduction in boron concentration of the reactor coolant system and immediately initiate corrective action to return the required RHR train to operation.

BASIS: One pressurizer safety valve is sufficient to prevent over-pressurizing when the reactor is subcritical, since its relieving capacity is greater than that required by the sum of the available heat sources, i.e., residual heat, pump energy and pressurizer heaters.

Prior to reducing boron concentration by dilution with makeup water either a reactor coolant pump or a residual heat removal pump is specified to be in operation in order to provide effective mixing. During boron injection, the operation of a pump, although desirable, is not essential. The boron is injected into an inlet leg of the reactor coolant loop. Thermal circulation which exists whenever there is residual heat in the core and the reactor coolant system is filled and vented, will cause the boron to flow to the core.

Lack of further mixing cannot result in areas of reduced boron concentration within the core. Prior to criticality the two pressurizer safety relief valves are specified in service in order to conform to the system relief capabilities.[1]

The plant is designed to have all three reactor coolant loops operational during normal power operation (Modes 1 and 2). Under these conditions, the DNB ratio will not drop below 1.30 after a loss of flow with a reactor trip.[2][3] With one reactor coolant loop not in operation, this specification requires that the plant be in at least Hot Standby within one hour. However, exception is taken whenever reactor power is less than 10% of full power. Heat transfer analyses show that reactor heat equivalent to 8% of full power can be removed with natural circulation only; hence, for up to 24 hours the specified upper limit of 10% of full power with 1 or 2 reactor coolant pumps operating provides a substantial safety factor.

In modes other than Modes 1 and 2, functional redundancy in the core heat removal methods (not necessarily system redundancy) is specified to satisfy single failure considerations. Functional redundancy, as applied to the San Onofre Unit 1 power plant, includes use of diverse heat removal methods. Furthermore, single failure considerations apply only to active components.

In Mode 3, a single reactor coolant loop provides sufficient capability for removing decay heat; however, single failure considerations require that two loops be OPERABLE.

In Mode 4 and Mode 5 (reactor coolant loops filled), a single reactor coolant loop or RHR train provides sufficient capability for removing decay heat; but single failure considerations require that at least two methods (either RCS loop or RHR train) be OPERABLE.

In Mode 5 (reactor coolant loops not filled), a single RHR train provides sufficient heat removal capability for removing decay heat; but single failure considerations, and the unavailability of any of the steam generators as a heat removing component, require that at least two RHR trains be OPERABLE.

The operation of one reactor coolant pump or one residual heat removal pump provides adequate flow to ensure mixing, prevent stratification and produce gradual reactivity changes during boron concentration reductions in the Reactor Coolant System. The reactivity change rate associated with boron reduction will, therefore, be within the capability of operator recognition and control.[4]

<u>References</u>:

(1) Final Engineering Report and Safety Analysis, Sections 9 and 10.

(2) Final Engineering Report and Safety Analysis, Paragraph 10.2.

(3) Supplement No. 1 to Final Engineering Report and Safety Analysis, Section 3, Question 9.

(4) NRC letter dated June 11, 1980, from D. G. Eisenhut to all operating pressurized water reactors.

TABLE 4.1.2
MINIMUM EQUIPMENT CHECK AND SAMPLING FREQUENCY

		Check	Frequency
1a. Reactor Coolant Samples	1.	Gross Activity Determination	At least once per 72 hours. Required during Modes 1, 2, 3, 4, 5 and 6.
	2.	Isotopic Analysis for DOSE EQUIVALENT I-131 Concentration	1 per 14 days. Required only during Mode 1.
	3.	Spectrascopic for $\bar{E}$ (1) Determination	1 per 6 months (2) Required only during Mode 1.
	4.	Isotopic Analysis for Iodine Including I-131, I-133, and I-135.	a) Once per 4 hours, (3) whenever the specific activity exceeds 1.0 m Ci/gram DOSE EQUIVALENT I-131 or 100/ $\bar{E}$ (1) m Ci/gram. b) One sample between 2 and 6 hours following a THERMAL POWER change exceeding 15 percent of the RATED THERMAL POWER within a one hour period.
	5.	Boron concentration	Twice/Week

(1) $\bar{E}$ is defined in Section 3.1.1.A.2.
(2) Sample to be taken after a minimum of 2 EFPD and 20 days of POWER OPERATION have elapsed since reactor was last subcritical for 48 hours or longer.
(3) Until the specific activity of the reactor coolant system is restored within its limits.

TABLE 4.1.2 (continued)

		Check	Frequency
1.b	Secondary Coolant Samples	1. Gross Activity Determination	At least once per 72 hours. Required only during Modes 1, 2, 3 and 4.
		2. Isotopic Analysis for DOSE EQUIVALENT I-131 Concentration	a) 1 per 31 days, whenever the gross activity determination indicates iodine concentrations greater than 10% of the allowable limit. Required only during Modes 1, 2, 3 and 4.
			b) 1 per 6 months, whenever the gross activity determination indicates iodine concentrations below 10% of the allowable limit. Required only during Modes 1, 2, 3, and 4.

TABLE 4.1.2 (continued)

			Check	Frequency
2.	Safety Injection Water Samples	a.	Boron Concentration	Monthly when the reactor is critical and prior to return of criticality when a period of subcriticality extends the test beyond 1 month
3.	Control Rod Drop	a.	Verify that all rods move from full out to full in, in less than 2.7 seconds	At each refueling shutdown
4.	(Deleted)			
5.	Pressurizer Safety Valves	a.	Pressure Setpoint	At each refueling shutdown
6.	Main Steam Safety Valves	a.	Pressure Setpoint	At each refueling shutdown
7.	Main Steam Power Operated Relief Valves	a.	Test for Operability	At each refueling shutdown
8.	Trisodium Phosphate Additive	a.	Check for system availability as delineated in Technical Specification 4.2	At each refueling shutdown
9.	Hydrazine Tank Water Samples	a.	Hydrazine concentration	Once every six months when the reactor is critical and prior to return of criticality when a period of subcriticality extends the test interval beyond six months
10.	Transfer Switch No. 7	a.	Verify that the fuse block for breaker 8-1181 to MCC 1 is removed	Monthly, when the reactor is critical and prior to returning reactor to critical when period of subcriticality extended the test interval beyond one month

TABLE 4.1.2 (continued)

			Check		Frequency
11.	MOV-LCV-1100 C Transfer Switch	a.	Verify that the fuse block for either breaker 8-1198 to MCC 1 or breaker 42-12A76 to MCC 2A is removed.		Same as Item 10 above
12.	Emergency Siren Transfer Switch	a.	Verify that the fuse block for either breaker 8-1145 to MCC 1 or breaker 8-1293A to MCC 2 is removed		Same as Item 10 above
13.	Communication Power Panel Transfer Switch	a.	Verify that the fuse block for either breaker 8-1195 to MCC 1 or breaker 8-1293B to MCC 2 is removed		Same as Item 10 above
14.a.	Spent Fuel Pool Water Level		Verify water level per Technical Specification 3.8	a.	Once every seven days when spent fuel is being stored in the pool.
b.	Refueling Pool Water Level			b.	Within two hours prior to start of and at least once per 24 hours thereafter during movement of fuel assemblies or RCC's.
15.	Reactor Coolant Loops/ Residual Heat Removal Loops	a.	Per Technical Specifications 3.1.2.c and 3.1.2.D, in Mode 1 and Mode 2 verify that all required reactor coolant loops are in operation and circulating reactor coolant.	a.	Once per 12 hours
		b.	Per Technical Specification 3.1.2.E, in Mode 3 verify		

TABLE 4.1.2 (continued)

Check	Frequency
1. At least two required reactor coolant pumps are operable with correct breaker alignments and indicated power availability.	1. Once per 7 days
2. The steam generators associated with the two required reactor coolant pumps are operable with secondary side water level $\geq$ 256 inches of narrow range on cold calibrated scale.	2. Once per 12 hours
3. At least one reactor coolant loop is in operation and circulating reactor coolant.	3. Once per 12 hours
c. Per Technical Specification 3.1.2.F, in Mode 4 verify	
1. At least two required (RC or RHR) pumps are operable with correct breaker alignments and indicated power availability.	1. Once per 7 days
2. The required steam generators are operable with secondary side water level $\geq$ 256 inches of narrow range on cold calibrated scale.	2. Once per 12 hours
3. At least one reactor coolant loop/RHR train is in operation and circulating reactor coolant.	3. Once per 12 hours
d. Per Technical Specifications 3.1.2.G and 3.1.2.H, in Mode 5 verify, as applicable:	

TABLE 4.1.2 (continued)

		Check		Frequency
	1.	At least one RHR train is in operation and circulating reactor coolant.	1.	Once per 12 hours
	2.	When required, one additional RHR train is operable with correct pump breaker alignments and indicated power availability.	2.	Once per 7 days
	3.	When required, the secondary side water level of at least two steam generators is $\geq$ 256 inches of narrow range on cold calibrated scale.	3.	Once per 12 hours
e.	Per Technical Specification 3.8.A.3, in Mode 6, with water level in refueling pool greater than elevation 40 feet 3 inches, verify that at least one method of decay heat removal is in operation and circulating reactor coolant at a flow rate of at least 400 gpm.		e.	Once per 12 hours
f.	Per Technical Specification 3.8.A.4, in Mode 6, with water level in refueling pool less than elevation 40 feet 3 inches, verify			
	1.	At least one decay heat removal method is in operation and circulating reactor coolant.	1.	Once per 12 hours
	2.	One additional decay heat removal method is operable with correct pump breaker alignments and indicated power availability.	2.	Once per 7 days

ENCLOSURE II

Consists of pages numbered 3-6 through 3-10 and 4-7 through 4-12.

ENCLOSURE II

3.1.2 OPERATIONAL COMPONENTS

APPLICABILITY: Applies to the operating status of the reactor coolant system equipment and related equipment. For the applicable surveillance requirements, see Table 4.1.2.

OBJECTIVE: To identify those conditions of the reactor coolant system necessary to ensure safe reactor operation.

SPECIFICATIONS:

A. At least one pressurizer safety valve shall be operable or open when the reactor head is on the vessel, except for hydrostatic tests.

B. The reactor shall not be made critical or maintained critical unless both pressurizer safety valves are operable.

C. During Modes 1 and 2 and in Mode 3 with reactor trip breakers closed, all three reactor coolant loops and their associated steam generators and reactor coolant pumps shall be in operation. With less than the above required coolant loops in operation, be in at least Hot Standby with reactor trip breakers open within 1 hour, except as modified by Specification D below.

D. The limitations of Specification C may be suspended as follows:

   1. During Modes 1 and 2, operation may be conducted with 0, 1, 2 or 3 reactor coolant pumps operating at less than 5% of full power for purposes of conducting low power physics testing.

   2. During Modes 1 and 2 and in Mode 3 with reactor trip breakers closed, operation may be conducted for less than 24 consecutive hours with one or two reactor coolant pumps operating if reactor power is less than 10% of full power.

E. During Mode 3 with reactor trip breakers open, the following specifications shall apply:

   1. At least two of the reactor coolant loops listed below shall be operable:

      a. Reactor coolant loop A and its associated steam generator and reactor coolant pump.

      b. Reactor coolant loop B and its associated steam generator and reactor coolant pump.

      c. Reactor coolant loop C and its associated steam generator and reactor coolant pump.

2. At least one of the above reactor coolant loops shall be in operation.*

3. With less than the above required reactor coolant loops operable, restore the required loops to operable status within 72 hours or be in Hot Shutdown within the next 12 hours.

4. With no reactor coolant loop in operation, suspend all operations involving a reduction in boron concentration of the reactor coolant system and immediately initiate corrective action to return the required reactor coolant loop to operation.

F. During Mode 4, the following specifications shall apply:

1. At least two of the reactor coolant loops/residual heat removal (RHR) trains listed below shall be operable:

   a. Reactor coolant loop A and its associated steam generator and reactor coolant pump.

   b. Reactor coolant loop B and its associated steam generator and reactor coolant pump.

   c. Reactor coolant loop C and its associated steam generator and reactor coolant pump.

   d. Residual heat removal (RHR) pump G-14A and one associated RHR train.

   e. Residual heat removal (RHR) pump G-14B and one associated RHR train.

2. At least one of the above loops/trains shall be in operation.**

3. With less than the above required loops/trains operable immediately initiate corrective action to return the required loops/trains to operable status as soon as possible; if the remaining operable loop/train is an RHR train, be in Cold Shutdown within 24 hours.

* All reactor coolant pumps may be de-energized for up to one hour provided (a) no operations are permitted that would cause dilution of the reactor coolant system boron concentration, and (b) core outlet temperature is maintained at least 40°F below saturation temperature.

** All reactor coolant pumps and residual heat removal pumps may be de-energized for up to one hour provided (a) no operations are permitted that would cause dilution of the reactor coolant system boron concentration, and (b) core outlet temperature is maintained at least 40°F below saturation temperature.

4. With no loop or train in operation, suspend all operations involving a reduction in boron concentration of the reactor coolant system and immediately initiate corrective action to return one required loop or train to operation.

G. During Mode 5 with reactor coolant loops filled, the following specifications shall apply:

1. At least one residual heat removal (RHR) train shall be operable and in operation,* and either

   a. One additional RHR train shall be operable,** or

   b. The secondary side water level of at least two steam generators shall be greater than or equal to 256 inches of narrow range on cold calibrated scale.

2. With less than the above required loops/trains operable, or with less than the required steam generator level, immediately initiate corrective action to return the required loops/trains to operable status or to restore the required level as soon as possible.

3. With no RHR train in operation, suspend all operations involving a reduction in boron concentration of the reactor coolant system and immediately initiate corrective action to return the required RHR train to operation.

H. During Mode 5 with reactor coolant loops not filled, the following specifications shall apply:

1. Two residual heat removal (RHR) trains shall be operable** and at least one RHR train shall be in operation.*

2. With less than the above required RHR trains operable, immediately initiate corrective action to return the required RHR trains to operable status as soon as possible.

* The RHR pump may be de-energized for up to one hour provided (a) no operations are permitted that would cause dilution of the reactor coolant system boron concentration, and (b) core outlet temperature is maintained at least $40^{\circ}F$ below saturation temperature.

** One RHR train may be inoperable for up to 2 hours for surveillance testing, provided the other RHR train is operable and in operation.

3. With no RHR train in operation, suspend all operations involving a reduction in boron concentration of the reactor coolant system and immediately initiate corrective action to return the required RHR train to operation.

BASIS:

One pressurizer safety valve is sufficient to prevent over-pressurizing when the reactor is subcritical, since its relieving capacity is greater than that required by the sum of the available heat sources, i.e., residual heat, pump energy and pressurizer heaters.

Prior to reducing boron concentration by dilution with makeup water either a reactor coolant pump or a residual heat removal pump is specified to be in operation in order to provide effective mixing. During boron injection, the operation of a pump, although desirable, is not essential. The boron is injected into an inlet leg of the reactor coolant loop. Thermal circulation which exists whenever there is residual heat in the core and the reactor coolant system is filled and vented, will cause the boron to flow to the core.

Lack of further mixing cannot result in areas of reduced boron concentration within the core. Prior to criticality the two pressurizer safety relief valves are specified in service in order to conform to the system relief capabilities.(1)

The plant is designed to have all three reactor coolant loops operational during normal power operation (Modes 1 and 2). Under these conditions, the DNB ratio will not drop below 1.30 after a loss of flow with a reactor trip.(2)(3) With one reactor coolant loop not in operation, this specification requires that the plant be in at least Hot Standby with reactor trip breakers open within one hour (for the significance of the trip breaker position, see the next paragraph). However, exception is taken whenever reactor power is less than 10% of full power. Heat transfer analyses show that reactor heat equivalent to 8% of full power can be removed with natural circulation only; hence, for up to 24 hours the specified upper limit of 10% of full power with 1 or 2 reactor coolant pumps operating provides a substantial safety factor.

For operation in Mode 3 under all design basis conditions, it has been determined that one reactor coolant (RC) loop generally provides the required decay heat removal capability, the only exception to this being the control rod bank withdrawal from subcritical accident, when the DNB design basis may not be met. Since power to the gripper and lift coils of the control rod drive mechanism is carried through two reactor trip circuit breakers connected in series with the coils, both breakers must be manually closed before any control rod motion out of the core can take place. In light of this design feature, these Technical Specifications require that all three RC loops be in operation in Mode 3 if the reactor trip breakers are closed. Whenever the reactor trip breakers are open, the design feature would prevent any control rod motion, even though single failure considerations* require that at least two loops be operable. For the same reasons and subject to the same limitations that are stated in the preceding paragraph, exception is taken whenever reactor power is less than 10% of full power.

In Modes 4 and 5, the Technical Specifications permit functional redundancy in the core heat removal methods (not necessarily system redundancy) to satisfy single failure considerations. Functional redundancy, as applied to the San Onofre Unit 1 power plant, includes use of diverse heat removal methods.

In Mode 4 and Mode 5 (RC loops filled), a single RC loop or RHR train provides sufficient capability for removing decay heat; but single failure considerations* require that at least two methods (either RC loop or RHR train) be OPERABLE.

In Mode 5 (RC loops not filled), a single RHR train provides sufficient heat removal capability for removing decay heat; but single failure considerations,* and the unavailability of any of the steam generators as a heat removing component, require that at least two RHR trains be OPERABLE.

The operation of one reactor coolant pump or one residual heat removal pump provides adequate flow to ensure mixing, prevent stratification and produce gradual reactivity changes during boron concentration reductions in the Reactor Coolant System. The reactivity change rate associated with boron reduction will, therefore, be within the capability of operator recognition and control.[4]

References:

(1) Final Engineering Report and Safety Analysis, Sections 9 and 10.

(2) Final Engineering Report and Safety Analysis, Paragraph 10.2.

(3) Supplement No. 1 to Final Engineering Report and Safety Analysis, Section 3, Question 9.

(4) NRC letter dated June 11, 1980, from D. G. Eisenhut to all operating pressurized water reactors.

*Single failure considerations apply to active components.

TABLE 4.1.2
MINIMUM EQUIPMENT CHECK AND SAMPLING FREQUENCY

		Check	Frequency
1a. Reactor Coolant Samples	1.	Gross Activity Determination	At least once per 72 hours. Required during Modes 1, 2, 3, 4, 5 and 6.
	2.	Isotopic Analysis for DOSE EQUIVALENT I-131 Concentration	1 per 14 days. Required only during Mode 1.
	3.	Spectrascopic for $\bar{E}$ (1) Determination	1 per 6 months (2) Required only during Mode 1.
	4.	Isotopic Analysis for Iodine Including I-131, I-133, and I-135.	a) Once per 4 hours, (3) whenever the specific activity exceeds 1.0 m Ci/gram DOSE EQUIVALENT I-131 or 100/ $\bar{E}$ (1) m Ci/gram. b) One sample between 2 and 6 hours following a THERMAL POWER change exceeding 15 percent of the RATED THERMAL POWER within a one hour period.
	5.	Boron concentration	Twice/Week

(1) $\bar{E}$ is defined in Section 3.1.1.A.2.
(2) Sample to be taken after a minimum of 2 EFPD and 20 days of POWER OPERATION have elapsed since reactor was last subcritical for 48 hours or longer.
(3) Until the specific activity of the reactor coolant system is restored within its limits.

TABLE 4.1.2 (continued)

		Check	Frequency
1.b	Secondary Coolant Samples	1. Gross Activity Determination	At least once per 72 hours. Required only during Modes 1, 2, 3 and 4.
		2. Isotopic Analysis for DOSE EQUIVALENT I-131 Concentration	a) 1 per 31 days, whenever the gross activity determination indicates iodine concentrations greater than 10% of the allowable limit. Required only during Modes 1, 2, 3 and 4. b) 1 per 6 months, whenever the gross activity determination indicates iodine concentrations below 10% of the allowable limit. Required only during Modes 1, 2, 3, and 4.

TABLE 4.1.2 (continued)

			Check	Frequency
2.	Safety Injection Water Samples	a.	Boron Concentration	Monthly when the reactor is critical and prior to return of criticality when a period of subcriticality extends the test beyond 1 month
3.	Control Rod Drop	a.	Verify that all rods move from full out to full in, in less than 2.7 seconds	At each refueling shutdown
4.	(Deleted)			
5.	Pressurizer Safety Valves	a.	Pressure Setpoint	At each refueling shutdown
6.	Main Steam Safety Valves	a.	Pressure Setpoint	At each refueling shutdown
7.	Main Steam Power Operated Relief Valves	a.	Test for Operability	At each refueling shutdown
8.	Trisodium Phosphate Additive	a.	Check for system availability as delineated in Technical Specification 4.2	At each refueling shutdown
9.	Hydrazine Tank Water Samples	a.	Hydrazine concentration	Once every six months when the reactor is critical and prior to return of criticality when a period of subcriticality extends the test interval beyond six months
10.	Transfer Switch No. 7	a.	Verify that the fuse block for breaker 8-1181 to MCC 1 is removed	Monthly, when the reactor is critical and prior to returning reactor to critical when period of subcriticality extended the test interval beyond one month

TABLE 4.1.2 (continued)

			Check		Frequency
11.	MOV-LCV-1100 C Transfer Switch	a.	Verify that the fuse block for either breaker 8-1198 to MCC 1 or breaker 42-12A76 to MCC 2A is removed.		Same as Item 10 above
12.	Emergency Siren Transfer Switch	a.	Verify that the fuse block for either breaker 8-1145 to MCC 1 or breaker 8-1293A to MCC 2 is removed		Same as Item 10 above
13.	Communication Power Panel Transfer Switch	a.	Verify that the fuse block for either breaker 8-1195 to MCC 1 or breaker 8-1293B to MCC 2 is removed		Same as Item 10 above
14.a.	Spent Fuel Pool Water Level		Verify water level per Technical Specification 3.8	a.	Once every seven days when spent fuel is being stored in the pool.
b.	Refueling Pool Water Level			b.	Within two hours prior to start of and at least once per 24 hours thereafter during movement of fuel assemblies or RCC's.
15.	Reactor Coolant Loops/ Residual Heat Removal Loops	a.	Per Technical Specifications 3.1.2.C and 3.1.2.D, in Modes 1 and 2 and in Mode 3 with reactor trip breakers closed verify that all required reactor coolant loops are in operation and circulating reactor coolant.	a.	Once per 12 hours
		b.	Per Technical Specification 3.1.2.E, in Mode 3 with reactor trip breakers open verify		

TABLE 4.1.2 (continued)

	Check	Frequency
	1. At least two required reactor coolant pumps are operable with correct breaker alignments and indicated power availability.	1. Once per 7 days
	2. The steam generators associated with the two required reactor coolant pumps are operable with secondary side water level $\geq$ 256 inches of narrow range on cold calibrated scale.	2. Once per 12 hours
	3. At least one reactor coolant loop is in operation and circulating reactor coolant.	3. Once per 12 hours
c.	Per Technical Specification 3.1.2.F, in Mode 4 verify	
	1. At least two required (RC or RHR) pumps are operable with correct breaker alignments and indicated power availability.	1. Once per 7 days
	2. The required steam generators are operable with secondary side water level $\geq$ 256 inches of narrow range on cold calibrated scale.	2. Once per 12 hours
	3. At least one reactor coolant loop/RHR train is in operation and circulating reactor coolant.	3. Once per 12 hours
d.	Per Technical Specifications 3.1.2.G and 3.1.2.H, in Mode 5 verify, as applicable:	

TABLE 4.1.2 (continued)

		Check	Frequency
	1.	At least one RHR train is in operation and circulating reactor coolant.	1. Once per 12 hours
	2.	When required, one additional RHR train is operable with correct pump breaker alignments and indicated power availability.	2. Once per 7 days
	3.	When required, the secondary side water level of at least two steam generators is $\geq$ 256 inches of narrow range on cold calibrated scale.	3. Once per 12 hours
e.	Per Technical Specification 3.8.A.3, in Mode 6, with water level in refueling pool greater than elevation 40 feet 3 inches, verify that at least one method of decay heat removal is in operation and circulating reactor coolant at a flow rate of at least 400 gpm.		e. Once per 12 hours
f.	Per Technical Specification 3.8.A.4, in Mode 6, with water level in refueling pool less than elevation 40 feet 3 inches, verify		
	1.	At least one decay heat removal method is in operation and circulating reactor coolant.	1. Once per 12 hours
	2.	One additional decay heat removal method is operable with correct pump breaker alignments and indicated power availability.	2. Once per 7 days