

ATTACHMENT "A"
(Existing Specifications)
Unit 2

9707070384 970630
PDR ADOCK 05000361
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(18) Initial Test Program (Section 14, SER)

SCE shall conduct the post-fuel loading initial test program (set forth in Section 14 of the San Onofre Units 2 and 3 Final Safety Analysis Report, as amended) without making any major modifications to this program unless such modifications have been identified and have received prior NRC approval. Major modifications are defined as:

- a. Elimination of any test identified in Section 14 of the Final Safety Analysis Report, as amended, as being essential.
- b. Modification of test objectives, methods, or acceptance criteria for any test identified in Section 14 of the Final Safety Analysis Report, as amended, as being essential.
- c. Performance of any test at a power level different than that described in the test procedure.
- d. Failure to complete any tests included in the described program (planned or scheduled for power levels up to the authorized power level).

(19) WUREG-0737 Conditions (Section 22)

Each of the following conditions shall be completed to the satisfaction of the NRC. Each item references the related subpart of Section 22 of the SER and/or its supplements.

a. Shift Technical Advisor (1.A.1.1, SSER #1)

SCE shall provide a fully trained on-shift technical advisor to the shift supervisor (watch engineer).

b. Shift Manning (1.A.1.3, SSER #1, SSER #5)

SCE shall develop and implement administrative procedures to limit the working hours of individuals of the nuclear power plant operating staff who are responsible for manipulating plant controls or for adjusting on-line systems and equipment affecting plant safety which would have an immediate impact on public health and safety.

Adequate shift coverage shall be maintained without routine heavy use of overtime. However, in the event that unforeseen problems require substantial amounts of overtime to be used, the following guidelines shall be followed:

1. An individual shall not be permitted to work more than 16 hours straight (excluding shift turnover time).
2. An individual shall not be permitted to work more than 16 hours in any 24-hour period, nor more than 24 hours in any 48-hour period, nor more than 72 hours in any seven day period (all excluding shift turnover time).
3. A break of at least eight hours shall be allowed between work periods (including shift turnover time).
4. The use of overtime shall be considered on an individual basis and not for the entire staff on a shift.

Any deviation from the above guidelines shall be authorized by the station manager, his deputy, the operations manager, or higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation. Controls shall be included in the procedures such that individual overtime will be reviewed monthly by the station manager or his designee to assure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.

c. Independent Safety Engineering Group (I.B.1.2, SSER #1)

SCE shall have an on-site independent safety engineering group.

d. Procedures for Transients and Accidents (I.C.1, SSER #1, SSER #2, SSER #3)

By May 1, 1982, SCE shall provide emergency procedure guidelines. Emergency procedures based on guidelines approved by the NRC shall be implemented prior to startup following the first refueling outage.

e. Procedures for Verifying Correct Performance of Operating Activities (I.C.6, SSER #1)

Prior to fuel loading, SCE shall implement a system for verifying the correct performance of operating activities, and shall keep the system in effect thereafter.

f. Control Room Design Review (I.D.1, SSER #1)

Prior to exceeding five (5) percent power, SCE shall:

1. Prioritize the control room annunciator windows.

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.3.1.6	-----NOTE----- Not required to be performed until 12 hours after THERMAL POWER \geq 15% RTP.	120 days
	Verify linear power subchannel gains of the excore detectors are consistent with the values used to establish the shape annealing matrix elements in the CPCs.	
SR 3.3.1.7	-----NOTES----- 1. The CPC CHANNEL FUNCTIONAL TEST shall include verification that the correct values of addressable constants are installed in each OPERABLE CPC. 2. Not required to be performed for logarithmic power level channels until 2 hours after reducing THERMAL POWER below 1E-4% RTP and only if reactor trip circuit breakers (RTCBs) are closed.	30 days on a STAGGERED TEST BASIS
	Perform CHANNEL FUNCTIONAL TEST on each channel except power range neutron flux.	
SR 3.3.1.8	-----NOTE----- Neutron detectors are excluded from the CHANNEL CALIBRATION.	120 days
	Perform CHANNEL CALIBRATION of the power range neutron flux channels.	

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.3.2.4 -----NOTE----- Neutron detectors are excluded from CHANNEL CALIBRATION. ----- Perform a CHANNEL CALIBRATION on each logarithmic power channel, including bypass removal function.</p>	<p>24 months</p>
<p>SR 3.3.2.5 Verify RPS RESPONSE TIME is within limits.</p>	<p>24 months on a STAGGERED TEST BASIS</p>

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.3.5.2	Perform a CHANNEL FUNCTIONAL TEST of each ESFAS channel.	30 days on a STAGGERED TEST BASIS
SR 3.3.5.3	Perform a CHANNEL FUNCTIONAL TEST of each ESFAS channel bypass removal function.	120 days
SR 3.3.5.4	Perform a CHANNEL CALIBRATION of Function 5, Recirculation Actuation Signal, including bypass removal functions.	18 months
SR 3.3.5.5	Perform a CHANNEL CALIBRATION of each ESFAS channel, with the exception of Function 5, including bypass removal functions.	24 months
SR 3.3.5.6	Verify ESF RESPONSE TIME is within limits.	24 months on a STAGGERED TEST BASIS
SR 3.3.5.7	Perform a CHANNEL FUNCTIONAL TEST on each automatic bypass removal channel.	Once within 120 days prior to each reactor startup

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.3.10.1 Perform a CHANNEL CHECK on required FHIS radiation monitor channel.	12 hours
SR 3.3.10.2 Perform a CHANNEL FUNCTIONAL TEST on required FHIS radiation monitor channel. Verify radiation monitor setpoint Allowable Values: Airborne Gaseous: $\leq 6E4$ cpm above background.	92 days
SR 3.3.10.3 -----NOTE----- Testing of Actuation Logic shall include the actuation of each initiation relay and verification of the proper operation of each ignition relay. ----- Perform a CHANNEL FUNCTIONAL TEST on required FHIS Actuation Logic channel.	18 months
SR 3.3.10.4 Perform a CHANNEL FUNCTIONAL TEST on required FHIS Manual Trip logic.	18 months
SR 3.3.10.5 Perform a CHANNEL CALIBRATION on required FHIS radiation monitor channel.	18 months

Table 3.3.11-1 (page 1 of 1)
Post Accident Monitoring Instrumentation

FUNCTION	REQUIRED CHANNELS	CONDITIONS REFERENCED FROM REQUIRED ACTION F.1
1. Excore Neutron Flux	2	G
2. Reactor Coolant System Hot Leg Temperature	2 (1 per steam generator)	G
3. Reactor Coolant System Cold Leg Temperature	2 (1 per steam generator)	G
4. Reactor Coolant System Pressure (wide range)	2	G
5. Reactor Vessel Water Level	2(d)	H
6. Containment Sump Water Level (wide range)	2	G
7. Containment Pressure (wide range)	2	G
8. Containment Isolation Valve Position	2 per penetration flow path (a)(b)	G
9. Containment Area Radiation (high range)	2	H
10. Containment Hydrogen Monitors	2	G
11. Pressurizer Level	2	G
12. Steam Generator Water Level (wide range)	2 per steam generator	G
13. Condensate Storage Tank Level	2	G
14. Core Exit Temperature - Quadrant 1	2(c)	G
15. Core Exit Temperature - Quadrant 2	2(c)	G
16. Core Exit Temperature - Quadrant 3	2(c)	G
17. Core Exit Temperature - Quadrant 4	2(c)	G
18. Auxiliary Feedwater Flow	1 per steam generator	G
19. Containment Pressure (narrow range)	2	G
20. Reactor Coolant System Subcooling Margin Monitor	2	G
21. Pressurizer Safety Valve Position Indication	1 per valve	G
22. Containment Temperature	2	G
23. Containment Water Level (narrow range)	2	G
24. HPSI Flow Cold Leg	1 per cold leg	G
25. HPSI Flow Hot Leg	1 per hot leg	G
26. Steam Line Pressure	2 per steam generator	G
27. Refueling Water Storage Tank Level	2	G

(a) Not required for isolation valves whose associated penetration is isolated by at least one closed and de-activated automatic valve, closed manual valve, blind flange, or check valve with flow through the valve secured.

(b) Only one position indication channel is required for penetration flow paths with only one installed control room indication channel.

(c) A channel consists of two or more core exit thermocouples.

(d) A channel consists of eight sensors in a probe. A channel is OPERABLE if four or more sensors, one sensor in the upper head and three sensors in the lower head are OPERABLE.

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. No SDC train/RCS loop in operation.	B.1 Suspend all operations involving reduction in RCS boron concentration.	Immediately
	<u>AND</u>	
	B.2 Initiate action to restore required SDC train/RCS loop to operation.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.4.7.1 Verify at least one RCS loop or SDC train is in operation.	12 hours
SR 3.4.7.2 Verify required SG secondary side water level is $\geq 50\%$ (wide range).	12 hours
SR 3.4.7.3 Verify the second required RCS loop, SDC train or steam generator secondary is OPERABLE.	7 days

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.12.1 Low Temperature Overpressure Protection (LTOP) System

RCS Temperature $\leq 256^{\circ}\text{F}$

LCO 3.4.12.1 No more than two high pressure safety injection pumps shall be OPERABLE, the safety injection tanks shall be isolated or depressurized to less than the limit specified in Figure 3.4.3-2 and at least one of the following overpressure protection systems shall be OPERABLE:

- a. The Shutdown Cooling System Relief Valve (PSV9349) with:
 - 1) A lift setting of 406 ± 10 psig,
 - 2) Relief Valve isolation valves 2HV9337, 2HV9339, 2HV9377, and 2HV9378 open,

or,

- b. The Reactor Coolant System depressurized with an RCS vent of greater than or equal to .6 square inches.

APPLICABILITY: MODE 4 when the temperature of any one RCS cold leg is less than or equal to the enable temperatures specified in Table 3.4.3-1,

MODE 5, and

MODE 6 when the head is on the reactor vessel.

-----NOTE-----

SIT isolation or depressurization to less than the Figure 3.4.3-2 limit is only required when SIT pressure is greater than or equal to the maximum RCS pressure for the existing RCS cold leg temperature allowed by the P/T limit curves provided in Figure 3.4.3-1 and Figure 3.4.3-2.

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.7.5.1 Verify each AFW manual, power operated, and automatic valve in each water flow path and in both steam supply flow paths to the steam turbine driven pump, that is not locked, sealed, or otherwise secured in position, is in the correct position.</p>	<p>31 days</p>
<p>SR 3.7.5.2 -----NOTE----- Not required to be performed for the turbine driven AFW pump until 72 hours after reaching 800 psig in the steam generators.</p> <p>Verify the developed head of each AFW pump at the flow test point is greater than or equal to the required developed head.</p>	<p>31 days on a STAGGERED TEST BASIS</p>
<p>SR 3.7.5.3 -----NOTE----- Not required to be performed for the turbine driven AFW pump until 72 hours after reaching 800 psig in the steam generators.</p> <p>Verify each AFW automatic valve actuates to the correct position on an actual or simulated actuation signal when in MODE 1, 2, or 3 except valves HV-8200 and HV-8201.</p>	<p>24 months</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.7.5.4</p> <p>-----NOTE----- Not required to be performed for the turbine driven AFW pump until 72 hours after reaching 800 psig in the steam generators.</p> <p>Verify each AFW pump starts automatically on an actual or simulated actuation signal when in MODE 1, 2, or 3.</p>	<p>24 months</p>
<p>SR 3.7.5.5</p> <p>Verify the proper alignment of the required AFW flow paths by verifying flow from the condensate storage tank to each steam generator.</p>	<p>Prior to entering MODE 2 whenever unit has been in MODE 5 or 6 for > 30 days</p>

5.5 Procedures, Programs, and Manuals

- 5.5.2.8 Primary Coolant Sources Outside Containment Program (continued)
system (post-accident sampling return piping only). The program shall include the following:
- a. Preventive maintenance and periodic visual inspection requirements; and
 - b. Integrated leak test requirements for each system at refueling cycle intervals or less.
- 5.5.2.9 Pre-Stressed Concrete Containment Tendon Surveillance Program
This program provides controls for monitoring any tendon degradation in pre-stressed concrete containment, including effectiveness of its corrosion protection medium, to ensure containment structural integrity. Program itself is relocated to the LCS.
- 5.5.2.10 Inservice Testing Program
This program provides controls for inservice testing of ASME Code Class 1, 2, and 3 components including applicable supports. Program itself is relocated to the LCS.
- 5.5.2.11 Steam Generator (SG) Tube Surveillance Program
This program provides controls for monitoring SG tube degradation. Each SG shall be demonstrated OPERABLE by meeting the requirements of Specification 5.5.2.11 and by meeting an augmented inservice inspection program based on a modification of Regulatory Guide 1.83, Revision 1, which includes at least the following:
- a. SG Sample Selection and Inspection
Each SG shall be determined OPERABLE during shutdown by selecting and inspecting at least the minimum number of SG specified in Table 5.5.2.11-1.
 - b. SG Tube Sample Selection and Inspection
The SG tube minimum sample size, inspection result classification, and the corresponding action required shall be as specified in Table 5.5.2.11-1. The inservice inspection of SG tubes shall be performed at the frequencies specified in Specification 5.5.2.11.e and the inspected tubes shall be verified acceptable per the acceptance criteria of Specification 5.5.2.11.f. The tubes selected for each inservice inspection shall include at least 3% of the total

(continued)

5.5 Procedures, Programs, and Manuals (continued)

5.5.2.11 Steam Generator Tube Surveillance Program

TABLE 5.2.11-1 (page 1 of 1)

STEAM GENERATOR TUBE INSPECTION
SUPPLEMENTAL SAMPLING REQUIREMENTS

1st Sample Inspection			2nd Sample Inspection		3rd Sample Inspection	
Sample Size	Result	Action Required	Result	Action Required	Result	Action Required
A minimum of S tubes per SG	C-1	None	N/A	N/A	N/A	N/A
	C-2	Plug defective tubes and inspect an additional 25 tubes in this SG	C-1	None	N/A	N/A
				Plug defective tubes and inspect an additional 45 tubes in this SG.	N/A	N/A
					C-1	N/A
					C-2	Plug defective tubes.
					C-3	Perform action for C-3 result of first sample.
			C-3	Perform action for C-3 result of first sample.	N/A	N/A
	C-3	Inspect all tubes in this SG, plug defective tubes and inspect 25 tubes in each other SG. Notification to NRC pursuant to 10CFR50.72	All other SGs C-1	None	N/A	N/A
			Some SGs C-2 but no other is C-3	Perform action for C-2 result of second sample.	N/A	N/A
			Additional SG is C-3	Inspect all tubes in each SG and plug defectives. tubes Notification to NRC pursuant to 10CFR50.72.	N/A	N/A

$S = 3 N/n \%$ Where N is the number of SGs in the unit and n is the number of SGs inspected during inspection period.

(continued)

ATTACHMENT "B"
(Existing Specifications)
Unit 3

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.3.1.6</p> <p>-----NOTE----- Not required to be performed until 12 hours after THERMAL POWER \geq 15% RTP.</p> <p>-----</p> <p>Verify linear power subchannel gains of the excore detectors are consistent with the values used to establish the shape annealing matrix elements in the CPCs.</p>	<p>120 days</p>
<p>SR 3.3.1.7</p> <p>-----NOTES-----</p> <ol style="list-style-type: none"> 1. The CPC CHANNEL FUNCTIONAL TEST shall include verification that the correct values of addressable constants are installed in each OPERABLE CPC. 2. Not required to be performed for logarithmic power level channels until 2 hours after reducing THERMAL POWER below 1E-4% RTP and only if reactor trip circuit breakers (RTCBs) are closed. <p>-----</p> <p>Perform CHANNEL FUNCTIONAL TEST on each channel except power range neutron flux.</p>	<p>30 days on a STAGGERED TEST BASIS</p>
<p>SR 3.3.1.8</p> <p>-----NOTE----- Neutron detectors are excluded from the CHANNEL CALIBRATION.</p> <p>-----</p> <p>Perform CHANNEL CALIBRATION of the power range neutron flux channels.</p>	<p>120 days</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.3.2.4 -----NOTE----- Neutron detectors are excluded from CHANNEL CALIBRATION. -----</p> <p>Perform a CHANNEL CALIBRATION on each logarithmic power channel, including bypass removal function.</p>	<p>24 months</p>
<p>SR 3.3.2.5 Verify RPS RESPONSE TIME is within limits.</p>	<p>24 months on a STAGGERED TEST BASIS</p>

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
SR 3.3.5.2 Perform a CHANNEL FUNCTIONAL TEST of each ESFAS channel.	30 days on a STAGGERED TEST BASIS
SR 3.3.5.3 Perform a CHANNEL FUNCTIONAL TEST of each ESFAS channel bypass removal function.	120 days
SR 3.3.5.4 Perform a CHANNEL CALIBRATION of Function 5, Recirculation Actuation Signal, including bypass removal functions.	18 months
SR 3.3.5.5 Perform a CHANNEL CALIBRATION of each ESFAS channel, with the exception of Function 5, including bypass removal functions.	24 months
SR 3.3.5.6 Verify ESF RESPONSE TIME is within limits.*	24 months on a STAGGERED TEST BASIS
SR 3.3.5.7 Perform a CHANNEL FUNCTIONAL TEST on each automatic bypass removal channel.	Once within 120 days prior to each reactor startup

*Verification of the RESPONSE TIME of the 30 subgroup relays identified in the February 18, 1997 Edison letter is not applicable until return to Mode 4 from the Unit 3 Cycle 9 refueling outage, with the additional commitments made in the February 18, 1997 letter. The safety justification for not performing this testing is also included in the February 18, 1997 letter.

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.3.10.1	Perform a CHANNEL CHECK on required FHIS radiation monitor channel.	12 hours
SR 3.3.10.2	Perform a CHANNEL FUNCTIONAL TEST on required FHIS radiation monitor channel. Verify radiation monitor setpoint Allowable Values: Airborne Gaseous: $\leq 6E4$ cpm above background.	92 days
SR 3.3.10.3	-----NOTE----- Testing of Actuation Logic shall include the actuation of each initiation relay and verification of the proper operation of each ignition relay. ----- Perform a CHANNEL FUNCTIONAL TEST on required FHIS Actuation Logic channel.	18 months
SR 3.3.10.4	Perform a CHANNEL FUNCTIONAL TEST on required FHIS Manual Trip logic.	18 months
SR 3.3.10.5	Perform a CHANNEL CALIBRATION on required FHIS radiation monitor channel.	18 months

Table 3.3.11-1 (page 1 of 1)
Post Accident Monitoring Instrumentation

FUNCTION	REQUIRED CHANNELS	CONDITIONS REFERENCED FROM REQUIRED ACTION F.1
1. Excore Neutron Flux	2	G
2. Reactor Coolant System Hot Leg Temperature	2 (1 per steam generator)	G
3. Reactor Coolant System Cold Leg Temperature	2 (1 per steam generator)	G
4. Reactor Coolant System Pressure (wide range)	2	G
5. Reactor Vessel Water Level	2(d)	H
6. Containment Sump Water Level (wide range)	2	G
7. Containment Pressure (wide range)	2	G
8. Containment Isolation Valve Position	2 per penetration flow path ^{(a)(b)}	G
9. Containment Area Radiation (high range)	2	H
10. Containment Hydrogen Monitors	2	C
11. Pressurizer Level	2	G
12. Steam Generator Water Level (wide range)	2 per steam generator	G
13. Condensate Storage Tank Level	2	G
14. Core Exit Temperature - Quadrant 1	2(c)	G
15. Core Exit Temperature - Quadrant 2	2(c)	G
16. Core Exit Temperature - Quadrant 3	2(c)	G
17. Core Exit Temperature - Quadrant 4	2(c)	G
18. Auxiliary Feedwater Flow	1 per steam generator	G
19. Containment Pressure (narrow range)	2	G
20. Reactor Coolant System Subcooling Margin Monitor	2	G
21. Pressurizer Safety Valve Position Indication	1 per valve	G
22. Containment Temperature	2	G
23. Containment Water Level (narrow range)	2	G
24. HPSI Flow Cold Leg	1 per cold leg	G
25. HPSI Flow Hot Leg	1 per hot leg	G
26. Steam Line Pressure	2 per steam generator	G
27. Refueling Water Storage Tank Level	2	G

(a) Not required for isolation valves whose associated penetration is isolated by at least one closed and de-activated automatic valve, closed manual valve, blind flange, or check valve with flow through the valve secured.

(b) Only one position indication channel is required for penetration flow paths with only one installed control room indication channel.

(c) A channel consists of two or more core exit thermocouples.

(d) A channel consists of eight sensors in a probe. A channel is OPERABLE if four or more sensors, one sensor in the upper head and three sensors in the lower head are OPERABLE.

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. No SDC train/RCS loop in operation.	B.1 Suspend all operations involving reduction in RCS boron concentration.	Immediately
	<u>AND</u>	
	B.2 Initiate action to restore required SDC train/RCS loop to operation.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.4.7.1	Verify at least one RCS loop or SDC train is in operation.	12 hours
SR 3.4.7.2	Verify required SG secondary side water level is $\geq 50\%$ (wide range).	12 hours
SR 3.4.7.3	Verify the second required RCS loop, SDC train or steam generator secondary is OPERABLE.	7 days

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.12.1 Low Temperature Overpressure Protection (LTOP) System

RCS Temperature $\leq 246^{\circ}\text{F}$

- LCO 3.4.12.1 No more than two high pressure safety injection pumps shall be OPERABLE, the safety injection tanks shall be isolated or depressurized to less than the limit specified in Figure 3.4.3-2 and at least one of the following overpressure protection systems shall be OPERABLE:
- a. The Shutdown Cooling System Relief Valve (PSV9349) with:
 - 1) A lift setting of 406 ± 10 psig,
 - 2) Relief Valve isolation valves 3HV9337, 3HV9339, 3HV9377, and 3HV9378 open,
 - or,
 - b. The Reactor Coolant System depressurized with an RCS vent of greater than or equal to 5.6 square inches.

APPLICABILITY: MODE 4 when the temperature of any one RCS cold leg is less than or equal to the enable temperatures specified in Table 3.4.3-1,

MODE 5, and

MODE 6 when the head is on the reactor vessel.

-----NOTE-----

SIT isolation or depressurization to less than the Figure 3.4.3-2 limit is only required when SIT pressure is greater than or equal to the maximum RCS pressure for the existing RCS cold leg temperature allowed by the P/T limit curves provided in Figure 3.4.3-1 and Figure 3.4.3-2.

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.7.5.1 Verify each AFW manual, power operated, and automatic valve in each water flow path and in both steam supply flow paths to the steam turbine driven pump, that is not locked, sealed, or otherwise secured in position, is in the correct position.</p>	<p>31 days</p>
<p>SR 3.7.5.2 -----NOTE----- Not required to be performed for the turbine driven AFW pump until 72 hours after reaching 800 psig in the steam generators.</p> <p>Verify the developed head of each AFW pump at the flow test point is greater than or equal to the required developed head.</p>	<p>31 days on a STAGGERED TEST BASIS</p>
<p>SR 3.7.5.3 -----NOTE----- Not required to be performed for the turbine driven AFW pump until 72 hours after reaching 800 psig in the steam generators.</p> <p>Verify each AFW automatic valve actuates to the correct position on an actual or simulated actuation signal when in MODE 1, 2, or 3 except valves HV-8200 and HV-8201.</p>	<p>24 months</p>

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SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.7.5.4</p> <p>-----NOTE----- Not required to be performed for the turbine driven AFW pump until 72 hours after reaching 800 psig in the steam generators.</p> <p>Verify each AFW pump starts automatically on an actual or simulated actuation signal when in MODE 1, 2, or 3.</p>	<p>24 months</p>
<p>SR 3.7.5.5</p> <p>Verify the proper alignment of the required AFW flow paths by verifying flow from the condensate storage tank to each steam generator.</p>	<p>Prior to entering MODE 2 whenever unit has been in MODE 5 or 6 for > 30 days</p>

5.5 Procedures, Programs, and Manuals

- 5.5.2.8 Primary Coolant Sources Outside Containment Program (continued)
system (post-accident sampling return piping only). The program shall include the following:
- a. Preventive maintenance and periodic visual inspection requirements; and
 - b. Integrated leak test requirements for each system at refueling cycle intervals or less.
- 5.5.2.9 Pre-Stressed Concrete Containment Tendon Surveillance Program
This program provides controls for monitoring any tendon degradation in pre-stressed concrete containment, including effectiveness of its corrosion protection medium, to ensure containment structural integrity. Program itself is relocated to the LCS.
- 5.5.2.10 Inservice Testing Program
This program provides controls for inservice testing of ASME Code Class 1, 2, and 3 components including applicable supports. Program itself is relocated to the LCS.
- 5.5.2.11 Steam Generator (SG) Tube Surveillance Program
This program provides controls for monitoring SG tube degradation. Each SG shall be demonstrated OPERABLE by meeting the requirements of Specification 5.5.2.11 and by meeting an augmented inservice inspection program based on a modification of Regulatory Guide 1.83, Revision 1, which includes at least the following:
- a. SG Sample Selection and Inspection
Each SG shall be determined OPERABLE during shutdown by selecting and inspecting at least the minimum number of SG specified in Table 5.5.2.11-1.
 - b. SG Tube Sample Selection and Inspection
The SG tube minimum sample size, inspection result classification, and the corresponding action required shall be as specified in Table 5.5.2.11-1. The inservice inspection of SG tubes shall be performed at the frequencies specified in Specification 5.5.2.11.e and the inspected tubes shall be verified acceptable per the acceptance criteria of Specification 5.5.2.11.f. The tubes selected for each inservice inspection shall include at least 3% of the total

(continued)

5.5 Procedures, Programs, and Manuals (continued)

5.5.2.11 Steam Generator Tube Surveillance Program

TABLE 5.2.11-1 (page 1 of 1)

STEAM GENERATOR TUBE INSPECTION
SUPPLEMENTAL SAMPLING REQUIREMENTS

1st Sample Inspection			2nd Sample Inspection		3rd Sample Inspection	
Sample Size	Result	Action Required	Result	Action Required	Result	Action Required
A minimum of S tubes per SG	C-1	None	N/A	N/A	N/A	N/A
	C-2	Plug defective tubes and inspect an additional 2S tubes in this SG	C-1	None	N/A	N/A
				Plug defective tubes and inspect an additional 4S tubes in this SG.	N/A	N/A
					C-1	N/A
					C-2	Plug defective tubes.
					C-3	Perform action for C-3 result of first sample.
			C-3	Perform action for C-3 result of first sample.	N/A	N/A
	C-3	Inspect all tubes in this SG, plug defective tubes and inspect 2S tubes in each other SG. Notification to NRC pursuant to 10CFR50.72	All other SGs C-1	None	N/A	N/A
			Some SGs C-2 but no other is C-3	Perform action for C-2 result of second sample.	N/A	N/A
			Additional SG is C-3	Inspect all tubes in each SG and plug defectives. tubes Notification to NRC pursuant to 10CFR50.72.	N/A	N/A

$S = 3 \frac{1}{4} / n \%$ Where N is the number of SGs in the unit and n is the number of SGs inspected during inspection period.

(continued)

ATTACHMENT "C"
(Proposed Specifications)
Unit 2

(18) Initial Test Program (Section 14, SER)

SCE shall conduct the post-fuel loading initial test program (set forth in Section 14 of the San Onofre Units 2 and 3 Final Safety Analysis Report, as amended) without making any major modifications to this program unless such modifications have been identified and have received prior NRC approval. Major modifications are defined as:

- a. Elimination of any test identified in Section 14 of the Final Safety Analysis Report, as amended, as being essential.
- b. Modification of test objectives, methods, or acceptance criteria for any test identified in Section 14 of the Final Safety Analysis Report, as amended, as being essential.
- c. Performance of any test at a power level different than that described in the test procedure.
- d. Failure to complete any tests included in the described program (planned or scheduled for power levels up to the authorized power level).

(19) NUREG-0737 Conditions (Section 22)

Each of the following conditions shall be completed to the satisfaction of the NRC. Each item references the related subpart of Section 22 of the SER and/or its supplements.

a. Shift Technical Advisor (I.A.1.1, SSEK #1)

SCE shall provide a fully trained on-shift technical advisor to the shift supervisor (watch engineer).

Deleted

b. Shift Manning (I.A.1.3, SSEK #1, SSER #5)

SCE shall develop and implement administrative procedures to limit the working hours of individuals of the nuclear power plant operating staff who are responsible for manipulating plant controls or for adjusting on-line systems and equipment affecting plant safety which would have an immediate impact on public health and safety.

Adequate shift coverage shall be maintained without routine heavy use of overtime. However, in the event that unforeseen problems require substantial amounts of overtime to be used, the following guidelines shall be followed:

1. An individual shall not be permitted to work more than 16 hours straight (excluding shift turnover time).
2. An individual shall not be permitted to work more than 16 hours in any 24-hour period, nor more than 24 hours in any 48-hour period, nor more than 72 hours in any seven day period (all excluding shift turnover time).
3. A break of at least eight hours shall be allowed between work periods (including shift turnover time).
4. The use of overtime shall be considered on an individual basis and not for the entire staff on a shift.

Any deviation from the above guidelines shall be authorized by the station manager, his deputy, the operations manager, or higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation. Controls shall be included in the procedures such that individual overtime will be reviewed monthly by the station manager or his designee to assure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.

c. Independent Safety Engineering Group (I.B.1.2, SSER #1)

SCE shall have an on-site independent safety engineering group.

d. Procedures for Transients and Accidents (I.C.1, SSER #1, SSER #2, SSER #3)

By May 1, 1982, SCE shall provide emergency procedure guidelines. Emergency procedures based on guidelines approved by the NRC shall be implemented prior to startup following the first refueling outage.

e. Procedures for Verifying Correct Performance of Operating Activities (I.C.5, SSER #1)

Prior to fuel loading, SCE shall implement a system for verifying the correct performance of operating activities, and shall keep the system in effect thereafter.

f. Control Room Design Review (I.D.1, SSER #1)

Prior to exceeding five (5) percent power, SCE shall:

1. Prioritize the control room annunciator windows.

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.3.1.6</p> <p>-----NOTE----- Not required to be performed until 12 hours after THERMAL POWER \geq 15% RTP.</p> <p>-----</p> <p>Verify linear power subchannel gains of the excore detectors are consistent with the values used to establish the shape annealing matrix elements in the CPCs.</p>	<p>120 days</p>
<p>SR 3.3.1.7</p> <p>-----NOTES-----</p> <ol style="list-style-type: none"> 1. The CPC CHANNEL FUNCTIONAL TEST shall include verification that the correct values of addressable constants are installed in each OPERABLE CPC. 2. Not required to be performed for logarithmic power level channels until 2 hours after reducing THERMAL POWER below 1E-4% RTP and only if reactor trip circuit breakers (RTCBs) are closed. <p>Perform CHANNEL FUNCTIONAL TEST on each channel except power range neutron flux.</p>	<p>30 days on a STAGGERED TEST BASIS</p>
<p>SR 3.3.1.8</p> <p>-----NOTE----- Neutron detectors are excluded from the CHANNEL CALIBRATION.</p> <p>-----</p> <p>Perform CHANNEL CALIBRATION of the power range neutron flux channels.</p>	<p>120 days</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.3.2.4</p> <p>-----NOTE----- Neutron detectors are excluded from CHANNEL CALIBRATION. -----</p> <p>Perform a CHANNEL CALIBRATION on each logarithmic power channel, including bypass removal function.</p>	<p>24 months</p>
<p>SR 3.3.2.5 Verify RPS RESPONSE TIME is within limits.</p>	<p>24 months on a STAGGERED TEST BASIS</p>

..... NOTE -----

Neutron detectors are excluded.

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
SR 3.3.5.2 Perform a CHANNEL FUNCTIONAL TEST of each ESFAS channel.	30 days on a STAGGERED TEST BASIS
SR 3.3.5.3 Perform a CHANNEL FUNCTIONAL TEST of each ESFAS channel bypass removal function.	120 days
SR 3.3.5.4 Perform a CHANNEL CALIBRATION of Function 5, Recirculation Actuation Signal, including bypass removal functions.	18 months
SR 3.3.5.5 Perform a CHANNEL CALIBRATION of each ESFAS channel, with the exception of Function 5, including bypass removal functions.	24 months
SR 3.3.5.6 Verify ESF RESPONSE TIME is within limits.	24 months on a STAGGERED TEST BASIS
SR 3.3.5.7 Perform a CHANNEL FUNCTIONAL TEST on each automatic bypass removal channel.	Once within 120 days prior to each reactor startup

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.3.10.1 Perform a CHANNEL CHECK on required FHIS radiation monitor channel.	12 hours
<p>SR 3.3.10.2 Perform a CHANNEL FUNCTIONAL TEST on required FHIS radiation monitor channel. Verify radiation monitor setpoint Allowable Values.</p> <p><i>trip setpoint is in accordance with the following:</i></p> <p><i>Airborne Gaseous: 654 cpm above background Sufficiently high to prevent spurious alarms/trips, yet sufficiently low to ensure an alarm/trip should a fuel handling accident occur.</i></p>	92 days
<p>SR 3.3.10.3 -----NOTE----- Testing of Actuation Logic shall include the actuation of each initiation relay and verification of the proper operation of each initiation ignition relay.</p> <p>Perform a CHANNEL FUNCTIONAL TEST on required FHIS Actuation Logic channel.</p>	18 months
SR 3.3.10.4 Perform a CHANNEL FUNCTIONAL TEST on required FHIS Manual Trip logic.	18 months
SR 3.3.10.5 Perform a CHANNEL CALIBRATION on required FHIS radiation monitor channel.	18 months

Table 3.3.11-1 (page 1 of 1)
Post Accident Monitoring Instrumentation

FUNCTION	REQUIRED CHANNELS	CONDITIONS REFERENCED FROM REQUIRED ACTION F.1
1. Excore Neutron Flux	2	G
2. Reactor Coolant System Hot Leg Temperature	2 (1 per steam generator)	G
3. Reactor Coolant System Cold Leg Temperature	2 (1 per steam generator)	G
4. Reactor Coolant System Pressure (wide range)	2	G
5. Reactor Vessel Water Level	2(d)	H
6. Containment System Water Level (wide range)	2	G
7. Containment Pressure (wide range)	2	G
8. Containment Isolation Valve Position:	2 per penetration flow path (a) (b)	G
9. Containment Area Radiation (high range)	2	H
10. Containment Hydrogen Monitors	2	G
11. Pressurizer Level	2	G
12. Steam Generator Water Level (wide range)	2 per steam generator	G
13. Condensate Storage Tank Level	2	G
14. Core Exit Temperature -- Quadrant 1	2(c)	G
15. Core Exit Temperature -- Quadrant 2	2(c)	G
16. Core Exit Temperature -- Quadrant 3	2(c)	G
17. Core Exit Temperature -- Quadrant 4	2(c)	G
18. Auxiliary Feedwater Flow	1 per steam generator	G
19. Containment Pressure (narrow range)	2	G
20. Reactor Coolant System Subcooling Margin Monitor	2	G
21. Pressurizer Safety Valve Position Indication	1 per valve	G
22. Containment Temperature	2	G
23. Containment Water Level (narrow range)	2	G
24. HPSI Flow Cold Leg	1 per cold leg	G
25. HPSI Flow Hot Leg	1 per hot leg	G
26. Steam Line Pressure	2 per steam generator	G
27. Refueling Water Storage Tank Level	2	G

(a) Not required for isolation valves whose associated penetration is isolated by at least one closed and de-activated automatic valve, closed manual valve, blind flange, or check valve with flow through the valve secured.

(b) Only one position indication channel is required for penetration flow paths with only one installed control room indication channel.

(c) A channel consists of two or more core exit thermocouples.

(d) A channel consists of eight sensors in a probe. A channel is OPERABLE if four or more sensors, one sensor in the upper head and three sensors in the lower head are OPERABLE.

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. No SDC train/RCS loop in operation.	B.1 Suspend all operations involving reduction in RCS boron concentration.	Immediately
	AND B.2 Initiate action to restore required SDC train/RCS loop to operation.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.4.7.1 Verify at least one RCS loop or SDC train is in operation.	12 hours
SR 3.4.7.2 Verify required SG secondary side water level is $\geq 50\%$ (wide range).	12 hours
SR 3.4.7.3 Verify the second required RCS loop, SDC train or steam generator secondary is OPERABLE.	7 days

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.12.1 Low Temperature Overpressure Protection (LTOP) System

RCS Temperature $\leq 256^{\circ}\text{F}$

LCO 3.4.12.1 No more than two high pressure safety injection pumps shall be OPERABLE, the safety injection tanks shall be isolated or depressurized to less than the limit specified in Figure 3.4.3-2 and at least one of the following overpressure protection systems shall be OPERABLE:

- a. The Shutdown Cooling System Relief Valve (PSV9349) with:
 - 1) A lift setting of 406 ± 10 psig,
 - 2) Relief Valve isolation valves 2HV9337, 2HV9339, 2HV9377, and 2HV9378 open,

or,

- b. The Reactor Coolant System depressurized with an RCS vent of greater than or equal to 5.6 square inches.

APPLICABILITY: MODE 4 when the temperature of any one RCS cold leg is less than or equal to the enable temperatures specified in Table 3.4.3-1,

MODE 5, and

MODE 6 when the head is on the reactor vessel and the RCS is not vented.

-----NOTE-----

SIT isolation or depressurization to less than the Figure 3.4.3-2 limit is only required when SIT pressure is greater than or equal to the maximum RCS pressure for the existing RCS cold leg temperature allowed by the P/T limit curves provided in Figure 3.4.3-1 and Figure 3.4.3-2.

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.7.5.1 Verify each AFW manual, power operated, and automatic valve in each water flow path and in both steam supply flow paths to the steam turbine driven pump, that is not locked, sealed, or otherwise secured in position, is in the correct position.</p>	<p>31 days</p>
<p>SR 3.7.5.2 -----NOTE----- Not required to be performed for the turbine driven AFW pump until 72 hours after reaching 800 psig in the steam generators. ----- Verify the developed head of each AFW pump at the flow test point is greater than or equal to the required developed head.</p>	<p>31 days on a STAGGERED TEST BASIS</p>
<p>SR 3.7.5.3 -----NOTE----- Not required to be performed for the turbine driven AFW pump until 72 hours after reaching 800 psig in the steam generators. ----- Verify each AFW automatic valve actuates to the correct position on an actual or simulated actuation signal when in MODE 1, 2, or 3 except valves HV-8200 and HV-8201.</p>	<p>24 months</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.7.5.4 -----NOTE----- Not required to be performed for the turbine driven AFW pump until 72 hours after reaching 800 psig in the steam generators.</p> <p>Verify each AFW pump starts automatically on an actual or simulated actuation signal when in MODE 1, 2, or 3.</p>	<p>24 months</p>
<p>SR 3.7.5.5 Verify the proper alignment of the required AFW flow paths by verifying flow from the condensate storage tank to each steam generator.</p>	<p>Prior to entering MODE 2 whenever unit has been in MODE 5 or 6 for > 30 days</p>

5.5 Procedures, Programs, and Manuals

5.5.2.8 Primary Coolant Sources Outside Containment Program (continued)

system (post-accident sampling return piping only). The program shall include the following:

- a. Preventive maintenance and periodic visual inspection requirements; and
- b. Integrated leak test requirements for each system at refueling cycle intervals or less.

5.5.2.9 Pre-Stressed Concrete Containment Tendon Surveillance Program

This program provides controls for monitoring any tendon degradation in pre-stressed concrete containment, including effectiveness of its corrosion protection medium, to ensure containment structural integrity. Program itself is relocated to the LCS.

5.5.2.10 ^{Inspection and} Inservice ^{Testing} Program

This program provides controls for ^{the} inservice ^{inspection and} testing of ASME Code Class 1, 2, and 3 components including applicable supports. ^{The} Program itself is ⁱⁿ relocated ^{to} the LCS.

5.5.2.11 Steam Generator (SG) Tube Surveillance Program

This program provides controls for monitoring SG tube degradation. Each SG shall be demonstrated OPERABLE by meeting the requirements of Specification 5.5.2.11 and by meeting an augmented inservice inspection program based on a modification of Regulatory Guide 1.83, Revision 1, which includes at least the following:

a. SG Sample Selection and Inspection

Each SG shall be determined OPERABLE during shutdown by selecting and inspecting at least the minimum number of SG specified in Table 5.5.2.11-1.

b. SG Tube Sample Selection and Inspection

The SG tube minimum sample size, inspection result classification, and the corresponding action required shall be as specified in Table 5.5.2.11-1. The inservice inspection of SG tubes shall be performed at the frequencies specified in Specification 5.5.2.11.e and the inspected tubes shall be verified acceptable per the acceptance criteria of Specification 5.5.2.11.f. The tubes selected for each inservice inspection shall include at least 3% of the total

(continued)

5.5 Procedures, Programs, and Manuals (continued)

5.5.2.11 Steam Generator Tube Surveillance Program
5.5.2.11-1

TABLE 5.5.2.11-1 (page 1 of 1)

STEAM GENERATOR TUBE INSPECTION
SUPPLEMENTAL SAMPLING REQUIREMENTS

1st Sample Inspection			2nd Sample Inspection		3rd Sample Inspection	
Sample Size	Result	Action Required	Result	Action Required	Result	Action Required
A minimum of S tubes per SG	C-1	None	N/A	N/A	N/A	N/A
	C-2	Plug defective tubes and inspect an additional 2S tubes in this SG.	C-1	None	N/A	N/A
			C-3	Plug defective tubes and inspect an additional 4S tubes in this SG.	N/A	N/A
					C-1	N/A
					C-2	Plug defective tubes.
					C-3	Perform action for C-3 result of first sample.
			C-3	Perform action for C-3 result of first sample.	N/A	N/A
	C-3	Inspect all tubes in this SG, plug defective tubes and inspect 2S tubes in each other SG.	All other SGs C-1	None	N/A	N/A
			Some SGs C-2 but no other is C-3	Perform action for C-2 result of second sample.	N/A	N/A
			Additional SG is C-3	Inspect all tubes in each SG and plug defectives. tubes. Notification to NRC pursuant to 10CFR 50.73.	N/A	N/A

S = $3 N/n$ % Where N is the number of SGs in the unit and n is the number of SGs inspected during inspection period.

(continued)

ATTACHMENT "D"
(Proposed Specifications)
Unit 3

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.3.1.6</p> <p>-----NOTE----- Not required to be performed until 12 hours after THERMAL POWER \geq 15% RTP.</p> <p>-----</p> <p>Verify linear power subchannel gains of the excore detectors are consistent with the values used to establish the shape annealing matrix elements in the CPCs.</p>	<p>120 days</p>
<p>SR 3.3.1.7</p> <p>-----NOTES-----</p> <ol style="list-style-type: none"> 1. The CPC CHANNEL FUNCTIONAL TEST shall include verification that the correct values of addressable constants are installed in each OPERABLE CPC. 2. Not required to be performed for logarithmic power level channels until 2 hours after reducing THERMAL POWER below 1E-4% RTP and only if reactor trip circuit breakers (RTCBs) are closed. <p>Perform CHANNEL FUNCTIONAL TEST on each channel except power range neutron flux.</p>	<p>30 days on a STAGGERED TEST BASIS</p>
<p>SR 3.3.1.8</p> <p>-----NOTE----- Neutron detectors are excluded from the CHANNEL CALIBRATION.</p> <p>-----</p> <p>Perform CHANNEL CALIBRATION of the power range neutron flux channels.</p>	<p>120 days</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.3.2.4</p> <p>-----NOTE----- Neutron detectors are excluded from CHANNEL CALIBRATION. -----</p> <p>Perform a CHANNEL CALIBRATION on each logarithmic power channel, including bypass removal function.</p>	<p>24 months</p>
<p>SR 3.3.2.5 Verify RPS RESPONSE TIME is within limits.</p>	<p>24 months on a STAGGERED TEST BASIS</p>

----- NOTE -----
Neutron detectors are excluded.

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
SR 3.3.5.2 Perform a CHANNEL FUNCTIONAL TEST of each ESFAS channel.	30 days on a STAGGERED TEST BASIS
SR 3.3.5.3 Perform a CHANNEL FUNCTIONAL TEST of each ESFAS channel bypass removal function.	120 days
SR 3.3.5.4 Perform a CHANNEL CALIBRATION of Function 5, Recirculation Actuation Signal, including bypass removal functions.	18 months
SR 3.3.5.5 Perform a CHANNEL CALIBRATION of each ESFAS channel, with the exception of Function 5, including bypass removal functions.	24 months
SR 3.3.5.6 Verify ESF RESPONSE TIME is within limits.*	24 months on a STAGGERED TEST BASIS
SR 3.3.5.7 Perform a CHANNEL FUNCTIONAL TEST on each automatic bypass removal channel.	Once within 120 days prior to each reactor startup

*Verification of the RESPONSE TIME of the 30 subgroup relays identified in the February 18, 1997 Edison letter is not applicable until return to Mode 4 from the Unit 3 Cycle 9 refueling outage, with the additional commitments made in the February 18, 1997 letter. The safety justification for not performing this testing is also included in the February 18, 1997 letter.

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.3.10.1 Perform a CHANNEL CHECK on required FHIS radiation monitor channel.	12 hours
<p>SR 3.3.10.2 Perform a CHANNEL FUNCTIONAL TEST on required FHIS radiation monitor channel. Verify radiation monitor setpoint Allowable Values</p> <p><i>trip setpoint is in accordance with the following:</i></p> <p><i>Airborne Gaseous: ≤ 554 cpm above background. Sufficiently high to prevent spurious alarms/trips, yet sufficiently low to ensure an alarm/trip should be handled when accident occur.</i></p>	92 days
<p>SR 3.3.10.3</p> <p>-----NOTE-----</p> <p>Testing of Actuation Logic shall include the actuation of each initiation relay and verification of the proper operation of each initiation <i>initiation</i> relay.</p> <p>-----</p> <p>Perform a CHANNEL FUNCTIONAL TEST on required FHIS Actuation Logic channel.</p>	18 months
SR 3.3.10.4 Perform a CHANNEL FUNCTIONAL TEST on required FHIS Manual Trip logic.	18 months
SR 3.3.10.5 Perform a CHANNEL CALIBRATION on required FHIS radiation monitor channel.	18 months

Table 3.3.11-1 (page 1 of 1)
Post Accident Monitoring Instrumentation

FUNCTION	REQUIRED CHANNELS	CONDITIONS REFERENCED FROM REQUIRED ACTION F.1
1. Excore Neutron Flux	2	G
2. Reactor Coolant System Hot Leg Temperature	2 (1 per steam generator)	G
3. Reactor Coolant System Cold Leg Temperature	2 (1 per steam generator)	G
4. Reactor Coolant System Pressure (wide range)	2	G
5. Reactor Vessel Water Level	2 ^(d)	H
6. Containment Comp Water Level (wide range)	2	G
7. Containment Pressure (wide range)	2	G
8. Containment Isolation Valve Position	2 per penetration flow path ^{(a)(b)}	G
9. Containment Area Radiation (high range)	2	H
10. Containment Hydrogen Monitors	2	G
11. Pressurizer Level	2	G
12. Steam Generator Water Level (wide range)	2 per steam generator	G
13. Condensate Storage Tank Level	2	G
14. Core Exit Temperature - Quadrant 1	2 ^(c)	G
15. Core Exit Temperature - Quadrant 2	2 ^(c)	G
16. Core Exit Temperature - Quadrant 3	2 ^(c)	G
17. Core Exit Temperature - Quadrant 4	2 ^(c)	G
18. Auxiliary Feedwater Flow	1 per steam generator	G
19. Containment Pressure (narrow range)	2	G
20. Reactor Coolant System Subcooling Margin Monitor	2	G
21. Pressurizer Safety Valve Position Indication	1 per valve	G
22. Containment Temperature	2	G
23. Containment Water Level (narrow range)	2	G
24. HPSI Flow Cold Leg	1 per cold leg	G
25. HPSI Flow Hot Leg	1 per hot leg	G
26. Steam Line Pressure	2 per steam generator	G
27. Refueling Water Storage Tank Level	2	G

(a) Not required for isolation valves whose associated penetration is isolated by at least one closed and de-activated automatic valve, closed manual valve, blind flange, or check valve with flow through the valve secured.

(b) Only one position indication channel is required for penetration flow paths with only one installed control room indication channel.

(c) A channel consists of two or more core exit thermocouples.

(d) A channel consists of eight sensors in a probe. A channel is OPERABLE if four or more sensors, one sensor in the upper head and three sensors in the lower head are OPERABLE.

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. No SDC train/RCS loop in operation.	B.1 Suspend all operations involving reduction in RCS boron concentration.	Immediately
	AND	
	B.2 Initiate action to restore required SDC train/RCS loop to operation.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.4.7.1 Verify at least one RCS loop or SDC train is in operation.	12 hours
SR 3.4.7.2 Verify required SG secondary side water level is $\pm 50\%$ (wide range).	12 hours
SR 3.4.7.3 Verify the second required RCS loop, SDC train or steam generator secondary is OPERABLE.	7 days

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.12.1 Low Temperature Overpressure Protection (LTOP) System

RCS Temperature $\leq 246^{\circ}\text{F}$

LCO 3.4.12.1 No more than two high pressure safety injection pumps shall be OPERABLE, the safety injection tanks shall be isolated or depressurized to less than the limit specified in Figure 3.4.3-2 and at least one of the following overpressure protection systems shall be OPERABLE:

- a. The Shutdown Cooling System Relief Valve (PSV9349) with:
 - 1) A lift setting of 406 ± 10 psig,
 - 2) Relief Valve isolation valves 3HV9337, 3HV9339, 3HV9377, and 3HV9378 open,
- or,
- b. The Reactor Coolant System depressurized with an RCS vent of greater than or equal to 5.6 square inches.

APPLICABILITY: MODE 4 when the temperature of any one RCS cold leg is less than or equal to the enable temperatures specified in Table 3.4.3-1,

MODE 5, and

MODE 6 when the head is on the reactor vessel and the RCS is not vented.

NOTE

SIT isolation or depressurization to less than the Figure 3.4.3-2 limit is only required when SIT pressure is greater than or equal to the maximum RCS pressure for the existing RCS cold leg temperature allowed by the P/T limit curves provided in Figure 3.4.3-1 and Figure 3.4.3-2.

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.7.5.1 Verify each AFW manual, power operated, and automatic valve in each water flow path and in both steam supply flow paths to the steam turbine driven pump, that is not locked, sealed, or otherwise secured in position, is in the correct position.</p>	<p>31 days</p>
<p>SR 3.7.5.2 NOTE Not required to be performed for the turbine driven AFW pump until 72 hours after reaching 800 psig in the steam generators.</p> <p>Verify the developed head of each AFW pump at the flow test point is greater than or equal to the required developed head.</p>	<p>31 days on a STAGGERED TEST BASIS</p>
<p>SR 3.7.5.3 NOTE Not required to be performed for the turbine driven AFW pump until 72 hours after reaching 800 psig in the steam generators.</p> <p>Verify each AFW automatic valve actuates to the correct position on an actual or simulated situation signal when in MODE 1, 2, or 3 except valves HV-8200 and HV-8201.</p>	<p>24 months</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.7.5.4</p> <p>-----NOTE----- Not required to be performed for the turbine driven AFW pump until 72 hours after reaching 800 psig in the steam generators.</p> <p>Verify each AFW pump starts automatically on an actual or simulated actuation signal when in MODE 1, 2, or 3.</p>	<p>24 months</p>
<p>SR 3.7.5.5</p> <p>Verify the proper alignment of the required AFW flow paths by verifying flow from the condensate storage tank to each steam generator.</p>	<p>Prior to entering MODE 2 whenever unit has been in MODE 5 or 6 for > 30 days</p>

5.5 Procedures, Programs, and Manuals

5.5.2.8 Primary Coolant Sources Outside Containment Program (continued)

system (post-accident sampling return piping only). The program shall include the following:

- a. Preventive maintenance and periodic visual inspection requirements; and
- b. Integrated leak test requirements for each system at refueling cycle intervals or less.

5.5.2.9 Pre-Stressed Concrete Containment Tendon Surveillance Program

This program provides controls for monitoring any tendon degradation in pre-stressed concrete containment, including effectiveness of its corrosion protection medium, to ensure containment structural integrity. Program itself is relocated to the LCS

5.5.2.10 Inservice ^{Inspection and} Testing Program

This program provides controls for ^{the} inservice ^{inspection and} testing of ASME Code Class 1, 2, and 3 components including applicable supports. Program itself is ⁱⁿ relocated ^{to} the LCS. ^{The}

5.5.2.11 Steam Generator (SG) Tube Surveillance Program

This program provides controls for monitoring SG tube degradation. Each SG shall be demonstrated OPERABLE by meeting the requirements of Specification 5.5.2.11 and by meeting an augmented inservice inspection program based on a modification of Regulatory Guide 1.83, Revision 1, which includes at least the following:

a. SG Sample Selection and Inspection

Each SG shall be determined OPERABLE during shutdown by selecting and inspecting at least the minimum number of SG specified in Table 5.5.2.11-1.

b. SG Tube Sample Selection and Inspection

The SG tube minimum sample size, inspection result classification, and the corresponding action required shall be as specified in Table 5.5.2.11-1. The inservice inspection of SG tubes shall be performed at the frequencies specified in Specification 5.5.2.11.e and the inspected tubes shall be verified acceptable per the acceptance criteria of Specification 5.5.2.11.f. The tubes selected for each inservice inspection shall include at least 3% of the total

(continued)

5.5 Procedures, Programs, and Manuals (continued)

5.5.2.11 Steam Generator Tube Surveillance Program

5.5.2.11-1

TABLE 5.2.11-1 (page 1 of 1)

STEAM GENERATOR TUBE INSPECTION
SUPPLEMENTAL SAMPLING REQUIREMENTS

1st Sample Inspection			2nd Sample Inspection		3rd Sample Inspection	
Sample Size	Result	Action Required	Result	Action Required	Result	Action Required
A minimum of S tubes per SG	C-1	None	N/A	N/A	N/A	N/A
	C-2	Plug defective tubes and inspect an additional 2S tubes in this SG	C-1	None	N/A	N/A
			C-3	Plug defective tubes and inspect an additional 4S tubes in this SG.	N/A	N/A
					C-1	N/A
					C-2	Plug defective tubes.
					C-3	Perform action for C-3 result of first sample.
	C-3	Inspect all tubes in this SG, plug defective tubes and inspect 2S tubes in each other SG.	C-3	Perform action for C-3 result of first sample.	N/A	N/A
			All other SGs C-1	None	N/A	N/A
			Some SGs C-2 but no other is C-3	Perform action for C-2 result of second sample.	N/A	N/A
		Notification to NRC pursuant to 10CFR50.73	Additional SG is C-3	Inspect all tubes in each SG and plug defectives. tubes. Notification to NRC pursuant to 10CFR50.73	N/A	N/A

S = 3 N/n % Where N is the number of SGs in the unit and n is the number of SGs inspected during inspection period.

(continue)