ATTACHMENT I

Proposed Technical Specification Changes

1. At least HOT STANDBY within the next 6 hours,
2. At least HOT SHUTDOWN within the following 6 hours, and
3. At least COLD SHUTDOWN within the subsequent 24 hours.

This specification is not applicable in MODES 5 or 6.

4.0.1 Surveillance Requirements shall be applicable during the OPERATIONAL MODES or other conditions specified for individual Limiting Conditions for Operation unless otherwise stated in an individual Surveillance Requirement.

4.0.2 Each Surveillance Requirement shall be performed within the specified time interval with:

a. A maximum allowable extension not to exceed 25% of the surveillance interval, and

b. The combined time interval for any 3 consecutive surveillance intervals not to exceed 3.25 times the specified surveillance interval.

4.0.3 Performance of a Surveillance Requirement within the specified time interval shall constitute compliance with OPERABILITY requirements for a Limiting Condition for Operation and associated ACTION statements unless otherwise required by the specification. Surveillance Requirements do not have to be performed on inoperable equipment.

4.0.4 Entry into an OPERATIONAL MODE or other specified condition shall not be made unless the Surveillance Requirement(s) associated with the Limiting Condition for Operation have been performed within the stated surveillance interval or as otherwise specified.

4.0.5 Surveillance Requirements for inservice inspection and testing of ASME Code Class 1, 2 and 3 components shall be applicable as follow :

a. Inservice inspection of ASME Code Class 1, 2 and 3 components and inservice testing of ASME Code Class 1, 2 and 3 pumps and valves shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50, Section 50.55a(g), except where specific written relief has been granted by the Commission pursuant to 10 CFR 50, Section 50.55a(g)(6)(i).

b. Surveillance intervals specified in Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda for the inservice inspection and testing activities required by the ASME Boiler and Pressure Vessel Code and applicable Addenda shall be applicable as follows in these Technical Specifications:

TABLE 3.3-1

REACTOR TRIP SYSTEM INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ACTION
1. Manual Reactor Trip	2	1	2	1, 2, and *	12
2. Power Range, Neutron Flux					
A. High	4	2	3	1, 2	2#
B. Low	4	2	3	2	2#
3. Power Range, Neutron Flux High Positive Rate	4	2	3	1, 2	2#
4. Power Range, Neutron Flux, High Negative Rate	4	2	3	1, 2	2#
5. Intermediate Range, Neutron Flux	2	1	2	1, 2, and *	3####
6. Source Range, Neutron Flux					
A. Startup	2	1	2###	2##, and *	4
B. Shutdown	2	0	1###	3, 4 and 5	5
7. Overtemperature ΔT					
Three Loop Operation	3	2	2	1, 2	7#
Two Loop Operation	3	1**	2	1, 2	9
8. Overpower ΔT					
Three Loop Operation	3	2	2	1, 2	7#
Two Loop Operation	3	1**	2	1, 2	9
9. Pressurizer Pressure-Low	3	2	2	1	7#
10. Pressurizer Pressure--High	3	2	2	1, 2	7#

TABLE 3.3-1 (Continued)

REACTOR TRIP SYSTEM INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ACTION
11. Pressurizer Water Level--High	3	2	2	1	7#
12. A. Loss of Flow - Single Loop (Above P-8)	3/loop	2/loop in any operating loop	2/loop in each operating loop	1	7#
B. Loss of Flow - Two Loops (Above P-7 and below P-8)	3/loop	2/loop in two operating loops	2/loop each operating loop	1	7#
13. Steam Generator Water Level--Low-Low	3/loop	2/loop in any operating loops	2/loop in each operating loop	1, 2	7#
14. Steam/Feedwater Flow Mismatch and Low Steam Generator Water Level	2/loop-level and 2/loop-flow mismatch in same loop	1/loop-level coincident with 1/loop-flow mismatch in same loop	1/loop-level and 2/loop-flow mismatch in same loop or 2/loop-level and 1/loop-flow mismatch in same loop	1, 2	7#
15. Undervoltage-Reactor Coolant Pumps	3-2/bus	2	2	1	7#
16. Underfrequency-Reactor Coolant Pumps	3-2/bus	2	2	1	7#

TABLE 3.3-1 (Continued)

REACTOR TRIP SYSTEM INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ACTION
17. Turbine Trip					
A. Low Auto Stop Oil Pressure	3	2	2	1	7#
B. Turbine Throttle Valve Closure	4	4	4	1	7#
18. Safety Injection Input from ESF	2	1	2	1, 2	1
19. Reactor Coolant Pump Breaker Position Trip					
A. Above P-8	1/breaker	1	1/breaker	1	10#
B. Above P-7	1/breaker	2	1/breaker per operating loop	1	11#
20. Reactor Trip System Interlocks					
A. Intermediate Range Neutron Flux, P-6	2	1	2	2, and*	8
B. Low Power Reactor Trips Block, P-7 P-10 Input	4	2	3	1	8
P-13 Input	2	1	2	1	8
C. Power Range Neutron Flux, P-8	4	2	3	1	8
D. Power Range Neutron Flux, P-10 (Input to P-7)	4	2	3	1, 2	8
E. Turbine Impulse Chamber Pressure, P-13	2	1	2	1	8
F. Power Range Neutron Flux, P-9	4	2	3	1	8

TABLE 3.3-1 (Continued)

REACTOR TRIP SYSTEM INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ACTION
21. Reactor Trip Breakers	2	1	2	1, 2, and *	1
22. Automatic Trip Logic	2	1	2	1, 2, and *	1

TABLE 3.3-1 (Continued)

TABLE NOTATION

*With the reactor trip system breakers in the closed position, the control rod drive system capable of rod withdrawal, and fuel in the reactor vessel.

**The channel(s) associated with the protective functions derived from the out of service Reactor Coolant Loop shall be placed in the tripped condition.

#The provisions of Specification 3.0.4 are not applicable.

##High voltage to detector may be de-energized above P-6.

###Indication only.

####The provisions of Specification 3.0.3 are not applicable if THERMAL POWER level ≥ 10% of RATED THERMAL POWER.

ACTION STATEMENTS

ACTION 1 - With the number of OPERABLE channels one less than required by the Minimum Channels OPERABLE requirement, be in HOT STANDBY within 6 hours; however, one channel may be bypassed for up to 2 hours for surveillance testing per Specification 4.3.1.1.

ACTION 2 - With the number of OPERABLE channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed provided the following conditions are satisfied:

a. The inoperable channel is placed in the tripped condition within 1 hour.

b. The Minimum Channels OPERABLE requirement is met; however, the inoperable ~~one additional~~ channel may be bypassed for up to 2 hours for surveillance testing of the other channels per Specification 4.3.1.1.

c. Either, THERMAL POWER is restricted to less than or equal to 75% of RATED THERMAL POWER and the Power Range, Neutron Flux trip setpoint is reduced to less than or equal to 85% of RATED THERMAL POWER within 4 hours; or, the QUADRANT POWER TILT RATIO is monitored at least once per 12 hours.

d. The QUADRANT POWER TILT RATIO, as indicated by the remaining three detectors, is verified consistent with the quadrant power distribution obtained by using the movable incore detectors in the four pairs of symmetric thimble locations at least once per 12 hours when THERMAL POWER is greater than 75% of RATED THERMAL POWER.

ACTION 3 - With the number of channels OPERABLE one less than required by the Minimum Channels OPERABLE requirement and with the THERMAL POWER level:

a. Below the P-6 (Block of Source Range Reactor Trip) setpoint, restore the inoperable channel to OPERABLE status prior to increasing THERMAL POWER above the P-6 Setpoint.

b. Above the P-6 (Block of Source Range Reactor Trip) setpoint, but below 5% of RATED THERMAL POWER, restore the inoperable channel to OPERABLE status prior to increasing THERMAL POWER above 5% of RATED THERMAL POWER.

c. Above 5% of RATED THERMAL POWER, POWER OPERATION may continue.

ACTION 4 - With the number of OPERABLE channels one less than required by the Minimum Channels OPERABLE requirement and with the THERMAL POWER level:

a. Below the P-6 (Block of Source Range Reactor Trip) setpoint, restore the inoperable channel to OPERABLE status prior to increasing THERMAL POWER above the P-6 Setpoint.

b. Above the P-6 (Block of Source Range Reactor Trip) setpoint, operation may continue.

ACTION 5 - With the number of OPERABLE channels one less than required by the Minimum Channels OPERABLE requirement, verify compliance with the SHUTDOWN MARGIN requirements of Specification 3.1.1.1 or 3.1.1.2, as applicable, within 1 hour and at least once per 12 hours thereafter.

ACTION 6 - With the number of OPERABLE channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed provided the following conditions are satisfied:

a. The inoperable channel is placed in the tripped condition within 1 hour.

b. The Minimum Channels OPERABLE requirement is met; however, one additional channel may be bypassed for up to 2 hours for surveillance testing per Specification 4.3.1.1.

ACTION 7 - With the number of OPERABLE channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed until performance of the next required CHANNEL FUNCTIONAL TEST provided the inoperable channel is placed in the tripped condition within 1 hour.

ACTION 8 - With the interlock inoperable to the extent that a reactor trip which should not be blocked in the current MODE is blocked, declare the trip function inoperable and follow the ACTION statements of Table 3.3-1 for the affected channel(s).

Interlock		Affected Channels on Table 3.3-1
1. P-6	a.	Source Range, Neutron Flux Startup Shutdown
2. P-7	a.	Low Reactor Coolant Loop Flow (2 loops)
	b.	Undervoltage - Reactor Coolant Pumps
	c.	Underfrequency - Reactor Coolant Pumps
	d.	Pressurizer Low Pressure
	e.	Pressurizer High Level
3. P-8	a.	Low Reactor Coolant Loop Flow (1 loop)
4. P-9	a.	Turbine Trip
5. P-10	a.	Intermediate Range, Neutron Flux
	b.	Power Range, Neutron Flux - Low Setpoint
	c.	Source Range, Neutron Flux Startup Shutdown
	d.	P-7 (Item 2 above)
6. P-13	a.	P-7 (Item 2 above)

ACTION 9 - With a channel associated with an operating loop inoperable, restore the inoperable channel to OPERABLE status within 2 hours or be in HOT STANDBY within the next 6 hours; however, one channel associated with an operating loop may be bypassed for up to 2 hours for surveillance testing per Specification 4.3.1.1.

ACTION 10 - With one channel inoperable, restore the inoperable channel to OPERABLE status within 2 hours or reduce THERMAL POWER to below the P-8 (Low Reactor Coolant Pump Flow and Reactor Coolant Pump Breaker Position) setpoint within the next 2 hours. Operation below the P-8 (Low Reactor Coolant Pump Flow and Reactor Coolant Pump Breaker Position) setpoint may continue pursuant to ACTION 11.

TABLE 3.3-1 (Continued)

ACTION 11 - With less than the Minimum Number of Channels OPERABLE, operation may continue provided the inoperable channel is placed in the tripped condition within 1 hour.

ACTION 12 - With the number of OPERABLE channels one less than required by the Minimum Channels OPERABLE requirement, restore the inoperable channel to OPERABLE status within 48 hours, or be in HOT STANDBY within the next 6 hours.

TABLE 4.3-1

REACTOR TRIP SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	MODES IN WHICH SURVEILLANCE REQUIRED
1. Manual Reactor Trip	N.A.	N.A.	S/U(1)	N.A.
2. Power Range, Neutron Flux				
A. High	S	D(2), M(3) and Q(6)	M	1, 2
B. Low	S	D(2), M(3) and Q(6)	S/U(10)	2
3. Power Range, Neutron Flux, High Positive Rate	N.A.	R(6)	M	1, 2
4. Power Range, Neutron Flux, High Negative Rate	N.A.	R(6)	M	1, 2
5. Intermediate Range, Neutron Flux	S	R(6)	S/U(1)	1, 2, and *
6. Source Range, Neutron Flux	S(7)	R(6)	M and S/U(1)	2, 3, 4, 5, and *
7. Overtemperature ΔT	S	R	M	1, 2
8. Overpower ΔT	S	R	M	1, 2
9. Pressurizer Pressure--Low	S	R	M	1
10. Pressurizer Pressure--High	S	R	M	1, 2
11. Pressurizer Water Level--High	S	R	M	1
12. A. Loss of Flow - Single Loop	S	R	M	1
B. Loss of Flow - Two Loops	S	R	N.A.	1

TABLE 4.3-1 (Continued)

REACTOR TRIP SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	MODES IN WHICH SURVEILLANCE REQUIRED
13. Steam Generator Water Level--Low-Low	S	R	M	1, 2
14. Steam/Feedwater Flow Mismatch and Low Steam Generator Water Level	S	R	M	1, 2
15. Undervoltage - Reactor Coolant Pumps	N.A.	R	M	1
16. Underfrequency - Reactor Coolant Pumps	N.A.	R	M	1
17. Turbine Trip				
A. Low Auto Stop Oil Pressure	N.A.	N.A.	S/U(9)(1)	N.A.
B. Turbine Throttle Valve Closure	N.A.	N.A.	S/U(9)(1)	N.A.
18. Safety Injection Input from ESF	N.A.	N.A.	M(4)	1, 2
19. Reactor Coolant Pump Breaker Position Trip	N.A.	N.A.	R	1
20. Reactor Trip System Interlocks	N.A.	R	S/U(8)	1
21. Reactor Trip Breaker	N.A.	N.A.	M(5) and S/U(1)	1, 2, and *
22. Automatic Trip Logic	N.A.	N.A.	M(5)	1, 2, and *

TABLE 4.3-1 (Continued)

TABLE NOTATION

* - With the reactor trip system breakers closed and the control rod drive system capable of rod withdrawal.

(1) - If not performed in previous 7 days.

(2) - Heat balance only, above 15% of RATED THERMAL POWER. Adjust channel if absolute difference greater than 2 percent.

(3) - Compare incore to excore axial flux difference above 15% of RATED THERMAL POWER. Recalibrate if the absolute difference greater than or equal to 3 percent.

(4) - Manual ESF functional input check every 18 months.

(5) - Each train or logic channel shall be tested at least every 62 days on a STAGGERED TEST BASIS.

(6) - Neutron detectors may be excluded from CHANNEL CALIBRATION.

(7) - Below the P-6 (Block of Source Range Reactor Trip) setpoint.

(8) - Logic only, if not performed in previous 92 days.

(9) - CHANNEL FUNCTIONAL TEST will consist of verifying that each channel indicates a turbine trip prior to latching the turbine and indicates no turbine trip after latching the turbine.

(10) - If not performed in the previous 31 days.

TABLE 3.3-3

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ACTION
1. SAFETY INJECTION, TURBINE TRIP AND FEEDWATER ISOLATION					
a. Manual Initiation	2	1	2	1, 2, 3, 4	18
b. Automatic Actuation Logic	2	1	2	1, 2, 3, 4	13
c. Containment Pressure-High	3	2	2	1, 2, 3	14*
d. Pressurizer Pressure - Low	3	2	2	1, 2, 3#	14*
e. Differential Pressure Between Steam Lines - High				1, 2, 3##	
Three Loops Operating	3/steam line	2/steam line twice and 1/3 steam lines	2/steam line		14*
Two Loops Operating	3/operating steam line	2###/steam line twice in either operating steam line	2/operating steam line		15

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ACTION
f. Steam Line Pressure-Low				1, 2, 3##	
Three Loops Operating	1 pressure/ loop	1 pressure any 2 loops	1 pressure any 2 loops		14*
Two Loops Operating	1 pressure/ loop	1### pressure in any operating loop	1 pressure any operating loop		15
2. CONTAINMENT SPRAY					--
a. Manual	2	1	2	1, 2, 3, 4	18
b. Automatic Actuation Logic	2	1	2	1, 2, 3, 4	13
c. Containment Pressure--High-High-High	4	2	3	1, 2, 3	16

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ACTION
3. CONTAINMENT ISOLATION					
a. Phase "A" Isolation					
1) Manual	2	1	2	1, 2, 3, 4	18
2) From Safety Injection Automatic Actuation Logic	2	1	2	1, 2, 3, 4	13
b. Phase "B" Isolation					
1) Manual	2	1	2	1, 2, 3, 4	18
2) Automatic Actuation Logic	2	1	2	1, 2, 3, 4	13
3) Containment Pressure High-High-High	4	2	3	1, 2, 3	16
c. Purge and Exhaust Isolation					
1) Manual	2	1	2	1, 2, 3, 4	17
2) Actomatic Actuation Logic	2	1	2	1, 2, 3, 4	17

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ACTION
4. STEAM LINE ISOLATION					
a. Manual	1/steam line	1/steam line	1/operating steam line	1, 2**, 3**	22
b. Automatic Actuation Logic	2	1	2	1, 2**, 3**	21
c. Containment Pressure--High-High	3	2	3	1, 2**, 3**	14*
d. Steam Flow in Two Steam Lines--High				1, 2**, 3**	
Three loops Operating	2/steam line	1/steam line any 2 steam lines	1/steam line		14*
Two loops Operating	2/operating steam line	1###/any operating steam line	1/operating steam line		15
COINCIDENT WITH T_{avg}--Low-Low				1, 2**, 3**	
Three loops Operating	1 T_{avg}/loop	1 T_{avg} any 2 loops	1 T_{avg} any 2 loops		14*
Two loops Operating	1 T_{avg}/operating loop	1### T_{avg} in any operating loop	1 T_{avg} in any operating loop		15

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ACTION
e. Steam Line Pressure-Low				1, 2, 3##, **	
Three Loops Operating	1 pressure/loop	1 pressure any 2 loops	1 pressure any 2 loops		14*
Two Loops Operating	1 pressure/operating loop	1### pressure in any operating loop	1 pressure any operating loop		15
5. TURBINE TRIP & FEEDWATER ISOLATION					
a. Steam Generator Water Level--High-High	3/loop	2/loop in any operating loop	2/loop in each operating loop	1, 2, #	14*

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ACTION
6. AUXILIARY FEEDWATER					
a. Automatic Actuation Logic	2	1	2	1, 2, 3	21
b. Stm. Gen. Water Level-Low-Low					
i. Start Motor Driven Pumps	3/stm. gen.	2/stm. gen. any stm gen.	2/stm. gen.	1, 2, 3	14*
ii. Start Turbine-Driven Pumps	3/stm. gen.	2/stm. gen. any 2 stm. gen.	2/stm. gen	1, 2, 3	14*
c. Undervoltage-RCP Start Turbine-Driven Pump	3-2/bus	2	2	1	14
d. S.I. Start Motor-Driven Pumps	See 1 above (all S.I. initiating functions and requirements)				
e. Trip of Main Feedwater Pumps Start Motor-Driven Pumps	2/pump	1/pump	1/pump	1	23*

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ACTION
7. LOSS OF POWER					
a. 4 kv Bus Loss of Voltage	3/Bus	2/Bus	2/Bus	1, 2, 3, 4	19*
b. Grid Degraded Voltage	3/Bus	2/Bus	2/Bus	1, 2, 3, 4	19*
8. ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INTERLOCKS					
a. Pressurizer Pressure, P-11	3	2	2	1, 2, 3	20
b. Low-Low T_{avg}, P-12	3	2	2	1, 2, 3	20
c. Steam Generator Level, P-14	(See 5.a above)				
d. Reactor Trip, P-4	2	1	2	1, 2, 3	13

TABLE 3.3-3 (Continued)

TABLE NOTATION

#Trip function may be bypassed in this MODE below the P-11. (Pressurizer Pressure Block of Safety Injection) setpoint.

##Trip function may be bypassed in this MODE below P-12. (T_{avg} Block of Safety Injection) setpoint.

###The channel(s) associated with the protective functions derived from the out of service Reactor Coolant Loop shall be placed in the tripped mode.

*The provisions of Specification 3.0.4 are not applicable.

** Not applicable if main steam isolation valves are closed.

ACTION STATEMENTS

ACTION 13 - With the number of OPERABLE channels one less than the ~~Total Number of~~ Minimum OPERABLE requirement Channels, be in HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours; however, one channel may be bypassed for up to 2 hours for surveillance testing per Specification 4.3.2.1 provided the other channel is OPERABLE.

ACTION 14 - With the number of OPERABLE channels one less than the Total Number of Channels, operation may proceed until performance of the next required CHANNEL FUNCTIONAL TEST provided the inoperable channel is placed in the tripped condition within 1 hour.

ACTION 15 - With a channel associated with an operating loop inoperable, restore the inoperable channel to OPERABLE status within 2 hours or be in at least HOT STANDBY within the next 6 hours and in at least HOT SHUTDOWN within the following 6 hours; however, one channel associated with an operating loop may be bypassed for up to 2 hours for surveillance testing per Specification 4.3.2.1.

ACTION 16 - With the number of OPERABLE channels one less than the Total Number of Channels, operation may proceed provided the inoperable channel is placed in the bypassed condition and the Minimum Channels OPERABLE requirement is ~~demonstrated within 1 hour~~ met; one additional channel may be bypassed for up to 2 hours for surveillance testing per Specification 4.3.2.1.

ACTION 17 - With less than the Minimum Channels OPERABLE, operation may continue provided the containment purge and exhaust valves are maintained closed.

ACTION 18 - With the number of OPERABLE Channels one less than the ~~Total Number of~~ Minimum OPERABLE requirement Channels, restore the inoperable channel to OPERABLE status within 48 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

TABLE 3.3-3 (Continued)

ACTION 19 - With the number of OPERABLE Channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed provided the following conditions are satisfied:

a. The inoperable channel is placed in the tripped condition within 1 hour.

b. The Minimum Channels OPERABLE requirements is met; however, the inoperable ~~one additional~~ channel may be bypassed for up to 2 hours for surveillance testing per Specification 4.3.2.1.

ACTION 20 - With the interlock inoperable to the extent that a safeguards function which should not be blocked in the current MODE is blocked, declare the safeguard function(s) inoperable of other channels and follow the appropriate ACTION statement(s) of Table 3.3-3 for the affected function(s).

Interlock	Affected Channels on Table 3.3-3
1. P-4	a. Pressurizer Pressure - Low
2. P-12	a. Steam Line Pressure - Low b. Steam Flow in Two Steam Lines High Coincident With T_{avg}-Low-Low

ACTION 21 - With the number of OPERABLE Channels one less than the ~~Total Number of~~ Minimum OPERABLE requirement Channels, be in at least HOT STANDBY within 6 hours and in at least HOT SHUTDOWN within the following 6 hours; however; one channel may be bypassed for up to 2 hours for surveillance testing provided the other channel is OPERABLE.

ACTION 22 - With the number of OPERABLE Channels one less than the Total Number of Channels restore the inoperable channel to OPERABLE status within 48 hours or be in at least HOT STANDBY within 6 hours and in HOT SHUTDOWN within the following 6 hours.

ACTION 23 - With the number of OPERABLE channels one less than the Minimum Number of Channels, operation may proceed until performance of the next required CHANNEL FUNCTIONAL TEST.

TABLE 4.3-2

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	MODES IN WHICH SURVEILLANCE REQUIRED
1. SAFETY INJECTION, TURBINE TRIP AND FEEDWATER ISOLATION				
a. Manual Initiation	N.A.	N.A.	M(1)	1, 2, 3, 4
b. Automatic Actuation Logic	N.A.	N.A.	M(2)	1, 2, 3, 4
c. Containment Pressure-High	S	R	M	1, 2, 3
d. Pressurizer Pressure--Low	S	R	M	1, 2, 3
e. Differential Pressure Between Steam Lines--High	S	R	M	1, 2, 3
f. Steam Line Pressure--Low	S	R	M	1, 2, 3
2. CONTAINMENT SPRAY				
a. Manual Initiation	N.A.	N.A.	M(1)	1, 2, 3, 4
b. Automatic Actuation Logic	N.A.	N.A.	M(2)	1, 2, 3, 4
c. Containment Pressure--High-High-High	S	R	M	1, 2, 3

TABLE 4.3-2 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	MODES IN WHICH SURVEILLANCE REQUIRED
3. CONTAINMENT ISOLATION				
a. Phase "A" Isolation				
1) Manual	N.A.	N.A.	M(1)	1, 2, 3, 4
2) From Safety Injection Automatic Actuation Logic	N.A.	N.A.	M(2)	1, 2, 3, 4
b. Phase "B" Isolation				
1) Manual	N.A.	N.A.	M(1)	1, 2, 3, 4
2) Automatic Actuation Logic	N.A.	N.A.	M(2)	1, 2, 3, 4
3) Containment Pressure--High-High-High	S	R	M	1, 2, 3
c. Purge and Exhaust Isolation				
1) Manual	N.A.	N.A.	M(1)	1, 2, 3, 4
2) Automatic Actuation Logic	N.A.	N.A.	M(2)	1, 2, 3, 4

TABLE 3.3-2 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	MODES IN WHICH SURVEILLANCE REQUIRED
4. STEAM LINE ISOLATION				
a. Manual	N.A.	N.A.	M(1)	1, 2, 3
b. Automatic Actuation Logic	N.A.	N.A.	M(2)	1, 2,
c. Containment Pressure--High-High	S	R	M	1, 2, 3
d. Steam Flow in Two Steam Lines--High Coincident with T_{avg}--Low-Low	S	R	M	1, 2, 3
e. Steam Line Pressure--Low	S	R	M	1, 2, 3
5. TURBINE TRIP AND FEEDWATER ISOLATION				
a. Steam Generator Water Level--High-High	S	R	M	1, 2, 3

TABLE 3.3-2 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	MODES IN WHICH SURVEILLANCE REQUIRED
6. AUXILIARY FEEDWATER				
a. Automatic Actuation Logic	N.A.	N.A.	M(2)(6)	1, 2, 3
b. Steam Generator Water Level--Low-Low	S	R	M	1, 2, 3
c. Undervoltage - RCP	~~X~~ N.A.	R	M	1
d. S.I.	See 1 above (all SI surveillance requirements)			
e. Trip of Main Feedwater Pumps	N.A.	N.A.	S/U(5)	1
7. LOSS OF POWER				
a. 4.16 kv Emergency Bus Undervoltage (Loss of Voltage)	N.A.	R(3)	M(4)	1, 2, 3, 4
b. 4.16 kv Emergency Bus Undervoltage (Degraded Voltage)	N.A.	R(3)	M(4)	1, 2, 3, 4
8. ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INTERLOCKS	N.A.	N.A.	R	N.A.

TABLE 4.3-2 (Continued)

TABLE NOTATION

(1) Manual actuation switches shall be tested at least once per 18 months during shutdown. All other circuitry associated with manual safeguards actuation shall receive a CHANNEL FUNCTIONAL TEST at least once per 31 days.

(2) Each train or logic channel shall be tested at least every 62 days on a STAGGERED TEST BASIS.

(3) Channel calibration shall exclude actuation of the final trip actuation relay.*

(4) Functional testing shall consist of verification of relay operation upon removal of input voltage and operation of 2-out-of-3 logic excluding the final trip actuation relay.*

(5) If not performed in the previous 92 days.

(6) Excluding automatic actuation logic for trip of main feedwater pumps.

*Actuation of the final trip actuation relay shall be included in response time testing.

INSTRUMENTATION

REMOTE SHUTDOWN INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.3.5 The remote shutdown monitoring instrumentation channels shown in Table 3.3-9 shall be OPERABLE with readouts displayed external to the control room.

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

a. With the number of OPERABLE remote shutdown monitoring channels less than required by Table 3.3-9, restore the inoperable channel to OPERABLE status within 7 31 days or be in HOT SHUTDOWN within the next 12 hours.

b. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.5 Each remote shutdown monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK and CHANNEL CALIBRATION operations at the frequencies shown in Table 4.3-6.

TABLE 3.3-__

ACCIDENT MONITORING INSTRUMENTATION

INSTRUMENT	REQUIRED NUMBER OF CHANNELS	MINIMUM CHANNELS OPERABLE
1. Reactor Coolant Outlet Temperature-T_{Hot}-Wide Range	2	1
2. Reactor Coolant Inlet Temperature-T_{Cold}-Wide Range	2	1
3. Reactor Coolant Pressure-Wide Range	2	1
4. Steam Generator Water Level-Wide Range or Narrow Range	2/steam generator	1/steam generator
5. Refueling Water Storage Tank Water Level	2	1
6. Containment Pressure	2	1
7. Pressurizer Water Level	2	1
8. Steam Line Pressure	2/steam generator	1/steam generator
9. Auxiliary Feedwater Flow Rate	2	1
10. Reactor Coolant System Subcooling Margin Monitor	2	1
*11. PORV Position Indicator	1/valve	1/valve
**12. PORV Block Valve Position Indicator	1/valve	1/valve
13. Safety Valve Position Indication (One channel is position indicator and one channel is discharge temperature)	~~1~~ 2/valve	1/valve
~~14. Containment Water Level-Narrow Range~~	~~2~~	~~1~~
~~15. Containment Water Level-Wide Range~~	~~2~~	~~1~~
~~14~~ 16. Incore Thermocouples	4/core quadrant	2/core quadrant

*Not applicable if the associated block valve is in the closed position.
**Not applicable if the block valve is verified in the closed position and power removed.

3/4.4.5 RELIEF VALVES

LIMITING CONDITION FOR OPERATION

3.4.5 All power relief valves (PORVs) and their associated block valves shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTION:

a. With one or more PORV(s) inoperable, within 1 hour either restore the PORV(s) to OPERABLE status or close the associated block valve(s) and remove power from the block valve(s); otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

b. With one or more block valve(s) inoperable, within 1 hour either restore the block valve(s) to OPERABLE status or close the block valve(s) and remove power from the block valve(s); otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

c. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.4.5.1 Each PORV shall be demonstrated OPERABLE at least once per 18 months by performance of a CHANNEL CALIBRATION and operating the valve through one cycle of full travel.

4.4.5.2 Each block valve shall be demonstrated OPERABLE ~~at least once per~~ during each COLD SHUTDOWN if not performed in the previous 92 days by operating the valve through one complete cycle of full travel or unless the block valve is closed with the power removed in order to meet the ACTION requirements of a. above.

CONTAINMENT STRUCTURAL INTEGRITY

LIMITING CONDITIONS FOR OPERATION

3.6.1.6 The structural integrity of the containment shall be maintained at a level consistent with the acceptance criteria in Specification 4.6.1.6.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With the structural integrity of the containment not conforming to the above requirements, restore the structural integrity to within the limits within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.6.1 Containment Tendons. The containment tendons' structural integrity shall be demonstrated at the end of one, three and five years following the initial containment structural integrity test and at five year intervals thereafter. The tendons' structural integrity shall be demonstrated by:

a. Determining that a representative sample of at least 21 tendons (6 dome, 5 vertical, and 10 hoop) each have a lift off force within the acceptance limits, defined as not less than the allowable lower bound force nor greater than the allowable upper bound force per wire at the time of the test as shown in Figure 4.6-1. This test shall include an unloading cycle in which each of these tendons is detensioned to determine if any wires or strands are broken or damaged. If the lift off force of any one tendon in the total sample population is out of the allowable bounds (less than minimum or greater than maximum), an adjacent tendon on each side of the defective tendon shall also be checked for lift off force. If both of these tendons are found acceptable, the surveillance program may proceed considering the single deficiency as unique and acceptable. More than one defective tendon out of the original sample population is evidence of abnormal degradation of the containment structure. Unless there is evidence of abnormal degradation of the containment structure during the first three tests of the tendons, the number of tendons checked for lift off force during subsequent tests may be reduced to a representative sample of at least 9 tendons (3 dome, 3 vertical and 3 hoop).

SURVEILLANCE REQUIREMENTS (Continued)

b. Removing one wire from each of a dome, vertical and hoop tendon checked for lift off force and determining that:

1. The corrosion level over the entire length of the tendon wires has not progressed since the original installation or the previous surveillance.

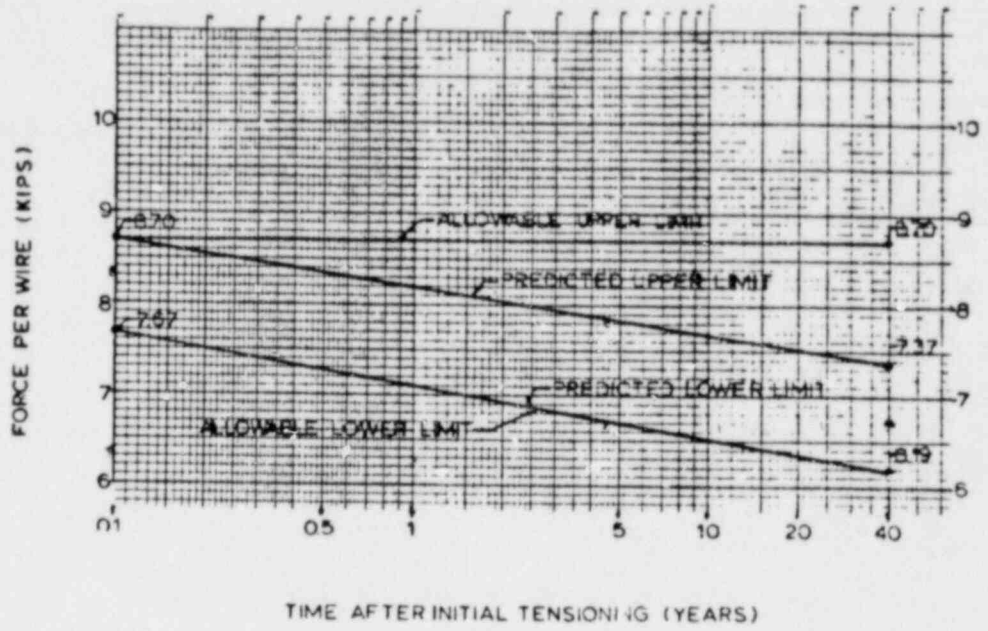
2. There are no changes in physical appearance of the sheathing filler material.

3. A minimum tensile strength of 240,000 pounds for at least three wire samples (one from each end and one at mid-length) cut from each removed wire. Failure of any one of the wire samples to meet the minimum tensile strength test is evidence of abnormal degradation of the containment structure.

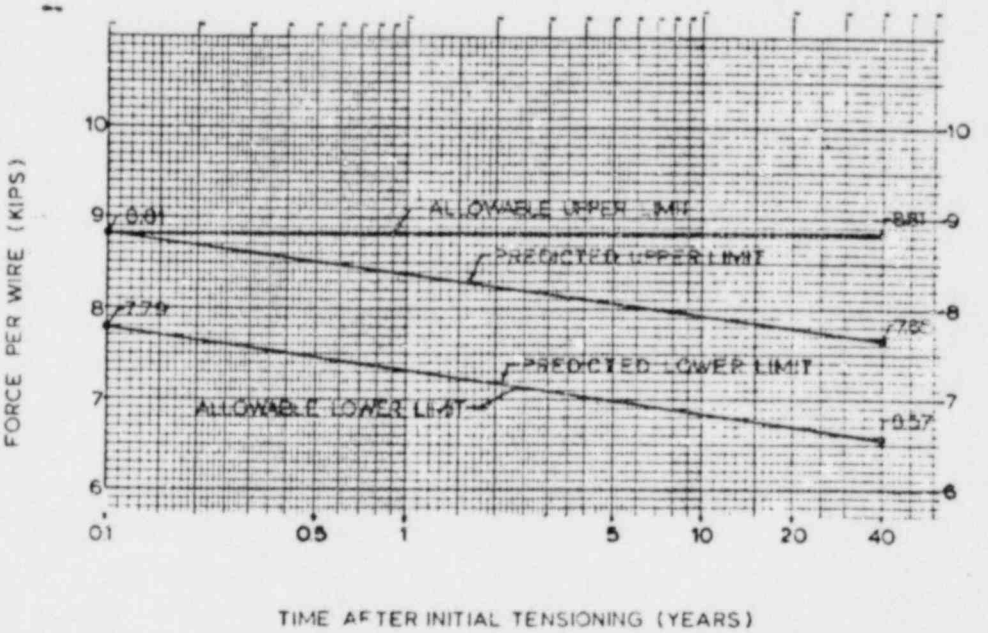
4.6.1.6.2 End Anchorages and Adjacent Concrete Surfaces The structural integrity of the end anchorages and adjacent concrete surfaces shall be demonstrated by determining through inspection that no adverse changes have occurred in the visual appearance of the end anchorage concrete exterior surfaces or the concrete crack patterns adjacent to the end anchorages. Inspections of the concrete shall be performed during the first Type A containment leakage rate tests only (reference Specification 4.6.1.2) while the containment is at its maximum test pressure.

4.6.1.6.3 Liner Plate The structural integrity of the containment liner plate shall be determined during the shutdown for the first Type A containment leakage rate test only (reference Specification 4.6.1.2) by a visual inspection of the plate and verifying no adverse changes in appearance or other abnormal degradation.

4.6.1.6.4 Reports An initial report of any abnormal degradation of the containment structure detected during the above required tests and inspections shall be made within 10 days after completion of the surveillance requirements of this specification and the detailed report shall be submitted pursuant to Specification 6.9.1 within 90 days after completion.



HOOP AND DOME TENDONS



VERTICAL TENDONS

FIGURE 4.6-1

ACCEPTANCE LIMITS
TENDON WIRE LIFT-OFF
FORCE VERSUS TIME

JOSEPH M. FARLEY NUCLEAR PLANT
TECHNICAL SPECIFICATION
UNIT NO. 1

SHEET 1

BASES OF LOAD VERSUS TIME CURVES

INITIAL LOCK-OFF FOR TENDON STRESSES CAN RANGE FROM .70 to .73 f_s' ("a" IN THE FORMULA BELOW), OR 8.25 KIPS / WIRE TO 8.60 KIPS / WIRE.

CALIBRATION OF THE STRESSING DEVICE IS ±2% TRACEABLE TO A NATIONAL STANDARD. ACTUAL WIRE FORCES ARE ACCURATE TO ±2%, HOWEVER, IF DIFFERENT DEVICES OR THE SAME DEVICE CALIBRATED BETWEEN TWO SURVEILLANCE PERIODS ARE USED ON THE SAME TENDON IN TWO SURVEILLANCES, THERE WOULD BE A POSSIBLE 4% SPREAD BETWEEN READINGS OF THE SAME TENDON LOAD. THUS, THE BAND FOR LOAD READINGS IS INCREASED TO ±4% ("K" IN THE FORMULA BELOW).

AN AVERAGE ELASTIC SHORTENING LOSS ("e" IN THE FORMULA BELOW) MUST BE DEDUCTED FROM THE INITIAL FORCE PER WIRE DUE TO SEQUENTIAL STRESSING OF THE TENDONS.

THE COMBINATION OF LOSSES DUE TO CREEP AND SHRINKAGE OF THE CONCRETE, AND STEEL RELAXATION VARIES DUE TO THE RANGES OF THE VARIABLES SHOWN IN THE TABLE BELOW.

THUS, THE GENERAL EXPRESSION FOR THE FORCE PER WIRE CAN BE GIVEN AS.

AT INITIAL INSTALLATION, $f_{w_i} = (a f_s' \times K - e) A_w$

AT FORTY YEARS, $f_{w_f} = f_{w_i} - A_w [(\varepsilon_c \times E_s \times \sigma_c/\sigma_c') + (\varepsilon_s \times E_s) + (r \times f_s)]$

(CONCRETE CREEP; CONCRETE SHRINKAGE; STEEL RELAXATION)

WHERE f_s' = TENSILE CAPACITY OF TENDON WIRE = 240 ksi

ε_c = CONCRETE STRAIN DUE TO CREEP

σ_c/σ_c' = MAXIMUM CONCRETE STRESS FOR THAT GENERAL AREA / MAXIMUM ALLOWABLE CONCRETE STRESS

ε_s = CONCRETE STRAIN DUE TO SHRINKAGE

r = PERCENT OF INITIAL PRESTRESS (f_s) LOST AT A CONSTANT SUSTAINED STRAIN

A_w = WIRE AREA = .04909 SQ IN

E_s = MODULUS OF ELASTICITY OF THE WIRE

	a		K		e ksi	ε_c μ in/in		E_s x10³ ksi		σ_c/σ_c'	ε_s μ in/in	r %		f_s' ksi
	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND		UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND			UPPER BOUND	LOWER BOUND	
HOOP & DOME TENDONS	.73	.70	1.04	.96	4.97	317	410	28.9	29.0	1.00	170	8.0	8.5	14.65
VERTICAL TENDONS	.73	.70	1.04	.96	2.68	317	410	28.9	29.0	.54	170	8.0	8.5	14.64

NOTE: THE 40 YEAR DESIGN PRESTRESS REQUIREMENTS FOR THE HOOP, DOME, AND VERTICAL TENDONS ARE 6.01, 6.35 AND 6.81 kips PER WIRE RESPECTIVELY. THE PREDICTED LOWER LIMIT ON THE GRAPH AT OR NEAR A TIME OF 40 YEARS FALLS BELOW THE DESIGN REQUIREMENT FOR THE DOME AND VERTICAL TENDONS. THIS IS ACCEPTABLE SINCE THE DEVIATION IS WITHIN THE ±4% LOAD READING ACCURACY.

FIGURE 4.6-1

ACCEPTANCE LIMITS
TENDON WIRE LIFT-OFF
FORCE VERSUS TIME

JOSEPH M. FARLEY NUCLEAR PLANT
TECHNICAL SPECIFICATION
UNIT NO. 1

SHEET 2

CONTAINMENT VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.1.7 The 48-inch containment purge supply and exhaust isolation valves (CBV-HV-3198A, 3198D, 3196, 3197) shall be closed. The 18-inch containment purge supply and exhaust isolation valves may be open.

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

ACTION:

With one 48-inch containment purge supply and/or one exhaust isolation valve open, close the open valve(s) within one hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.7.1 The 48-inch containment purge supply and exhaust isolation valves shall be determined closed at least once per 31 days.

4.6.1.7.2 The valve seals of the 48-inch and the 18-inch purge supply and exhaust isolation valves shall be replaced at least once per 5 years.

SURVEILLANCE REQUIREMENTS (Continued)

4.6.3.2 Each isolation valve specified in Table 3.6-1 shall be demonstrated OPERABLE during the COLD SHUTDOWN or REFUELING MODE at least once per 18 months by:

a. Verifying that on a Phase A containment isolation test signal, each Phase A isolation valve actuates to its isolation position.

b. Verifying that on a Phase B containment isolation test signal, each Phase B isolation valve actuates to its isolation position.

4.6.3.3 The isolation time of each power operated or automatic valve of Table 3.6-1 shall be determined to be within its limit when tested pursuant to Specification 4.0.5.

4.6.3.4 The containment purge isolation valves shall be demonstrated OPERABLE prior to startup after each COLD SHUTDOWN if not performed in the previous 3 months by verifying that when the measured leakage rate is added to the leakage rates determined pursuant to Specification 4.6.1.2.d for all other Type B and C penetrations, the combined leakage rate is less than or equal to $0.60L_a$. In addition, the leakage rate for the containment purge isolation valves shall be compared to the previously measured leakage rate (for the containment purge isolation valves) to detect excess valve degradation.

An engineering evaluation shall be performed to determine what corrective action, if any, is necessary.

PLANT SYSTEMS

MAIN STEAM LINE ISOLATION VALVES

LIMITING CONDITION FOR OPERATION

3.7.1.5 Each main steam line isolation valve shall be OPERABLE.

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

MODE 1 - With one main steam line isolation valve inoperable, POWER OPERATION may continue provided the inoperable valve is ~~either~~ restored to OPERABLE status ~~or closed~~ within 4 hours; otherwise, ~~be in~~ reduce ~~STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.~~ power to less than or equal to 5% of RATED THERMAL POWER within 6 hours.

MODES 2 and 3 - With one main steam line isolation valve inoperable, subsequent operation in MODES 2 or 3 may proceed provided the isolation valve is ~~maintained closed~~; otherwise, be in HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.

The provisions of Specification 3.0.4 are not applicable.

restored to OPERABLE status or closed within 4 hours after entering MODE 2

SURVEILLANCE REQUIREMENTS

4.7.1.5 Each main steam line isolation valve shall be demonstrated OPERABLE by verifying full closure within 5 seconds when tested pursuant to Specification 4.0.5.

SURVEILLANCE REQUIREMENTS (Continued)

b. Visual Inspection Acceptance Criteria

Visual inspections shall verify (1) that there are no visible indications of damage or impaired OPERABILITY, (2) attachments to the foundation or supporting structure are secure, and (3) in those locations where snubber movement can be manually induced without disconnecting the snubber, that the snubber has freedom of movement and is not frozen up. Snubbers which appear inoperable as a result of visual inspections may be determined OPERABLE for the purpose of establishing the next visual inspection interval, providing that (1) the cause of the rejection is clearly established and remedied for that particular snubber and for other snubbers that may be generically susceptible; and (2) the affected snubber is functionally tested in the as found condition and determined OPERABLE per Specifications 4.7.9.d or 4.7.9.e, as applicable. However, when the fluid port of a hydraulic snubber is found to be uncovered, the snubber shall be declared inoperable and cannot be determined OPERABLE via functional testing for the purpose of establishing the next visual inspection internal. All snubbers connected to an inoperable common hydraulic fluid reservoir shall be counted as inoperable snubbers.

c. Functional Tests

Insert →

At least once per 18 months during shutdown, a representative sample of 10% of the total of each type of snubber in use in the plant shall be functionally tested either in place or in a bench test. For each type of snubber which does not meet the functional test acceptance criteria of Specification 4.7.9.d or 4.7.9.e, an additional 10% of that type of snubber shall be functionally tested until no more failures are found or until all snubbers have been functionally tested.

initial →

The representative sample selected for functional testing shall include the various configurations, operating environments and the range of size and capacity of snubbers. At least 25% of the snubbers in the representative sample shall include snubbers from the following three categories:

1. The first snubber away from each reactor vessel nozzle

2. Snubbers within five feet of heavy equipment (valve, pump, turbine, motor, etc.)

3. Snubbers within ten feet of the discharge from a safety relief valve

Insert to 4.7.9.c

At least once per 18 months during shutdown, a representative sample of 88 snubbers shall be functionally tested either in place or in a bench test. If more than 3 snubbers do not meet the functional test acceptance criteria of Specification 4.7.9.d or 4.7.9.e, an additional sample selected according to the expression 22(a-3) shall be functionally tested, where a is the total number of snubbers found inoperable during the functional testing of the initial representative sample.

Functional testing shall continue according to the expression (22)b where b is the number of snubbers found inoperable in the previous re-sample, until no additional inoperable snubbers are found within a sample or until all snubbers in Tables 3.7-4a and 3.7-4b have been functionally tested.

Snubbers greater than 50,000 lb. capacity may be excluded from functional testing requirements.

SURVEILLANCE REQUIREMENTS (Continued)

e. Mechanical Snubbers Functional Test Acceptance Criteria*

The mechanical snubber functional test for snubbers rated above 350 pounds shall verify that:

1. The force that initiates free movement of the snubber rod in either tension or compression is less than the specified maximum drag force. Drag force shall not have increased more than 50% since the last functional test.

2. Activation (restraining action) is achieved within the specified range of velocity or acceleration in both tension and compression.

3. Snubber release rate, where required, is within the specified range in compression or tension. For snubbers specifically required not to displace under continuous load, the ability of the snubber to withstand load without displacement shall be verified.

The mechanical snubber functional test for snubbers rated less than 350 pounds shall verify that:

1. The snubber will stroke over its full range of travel in both tension and compression.

2. The snubber does not exhibit irregular travel or other indications of internal mechanical interference.

* This portion of the specification is effective prior to startup following the fourth refueling outage or when a commercial in-place testing device is available, whichever is later.

SPRAY AND/OR SPRINKLER SYSTEMS

LIMITING CONDITION FOR OPERATION

3.7.11.2 The spray and/or sprinkler systems listed in Table 3.7-5 shall be OPERABLE.

APPLICABILITY: Whenever equipment in the spray/sprinkler protected areas is required to be OPERABLE.

ACTION:

a. With one or more of the above required spray and/or sprinkler systems inoperable, within one hour establish a continuous fire watch with backup fire suppression equipment for those areas in which redundant systems or components could be damaged; for other areas, establish a hourly fire watch patrol. Restore the system to OPERABLE status within 14 days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.

b. The provisions of Specification 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.11.2 Each of the above required spray and/or sprinkler systems shall be demonstrated OPERABLE:

a. At least once per 31 days by verifying that each valve (manual, power operated or automatic) in the flow path in in its correct position.

b. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel.

CO_2 SYSTEMS

LIMITING CONDITION FOR OPERATION

3.7.11.3 The following high pressure and low pressure CO_2 systems shall be OPERABLE.

a. Service Water Intake Structure (each 4160 volt bus and each 600 volt load center - HP.

b. Turbine Building 13 ton unit and distribution system in the Auxiliary Building - L.P.

c. Diesel Building 5 ton unit and distribution system.

APPLICABILITY: Whenever equipment protected by the CO_2 systems in required to be OPERABLE.

ACTION:

a. With one or more of the above required CO_2 systems inoperable, within one hour establish a continuous fire watch with backup fire suppression equipment for those areas in which redundant systems or components could be damaged; for other areas, establish an hourly fire watch patrol. Restore the system to OPERABLE status within 14 days or, lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.

b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.11.3.1 Each of the above required CO_2 systems shall be demonstrated OPERABLE at least once per 31 days by verifying that each manual valve in the flow path is in its correct position.

4.7.11.3.2 Each of the above required low pressure CO_2 systems shall be demonstrated OPERABLE:

a. At least once per 7 days by verifying the CO_2 storage tank level to be greater than 50% and pressure to be greater than 250 psig, and

b. At least once per 18 months by verifying:

1. The system valves and associated ventilation dampers and fire door release mechanisms actuate manually and automatically, upon receipt of a simulated actuation signal, and

2. Flow from each nozzle during a "Puff Test."

3/4.7.12 FIRE BARRIER PENETRATIONS

LIMITING CONDITION FOR OPERATION

3.7.12 All fire barrier penetrations (including cable penetration barriers, firedoors and fire dampers) in fire zone boundaries protecting safety related areas shall be functional.

APPLICABILITY: At all times.

ACTION:

a. With one or more of the above required fire barrier penetrations non-functional, within one hour either, establish a continuous fire watch on at least one side of the affected penetration, or verify the OPERABILITY of fire detectors on at least one side of the non-functional fire barrier and establish a hourly fire watch patrol. Restore the non-functional fire barrier penetration(s) to functional status within 7 days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the non-functional penetration and plans and schedule for restoring the fire barrier penetration(s) to functional status.

b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.12 Each of the above required fire barrier penetrations shall be verified to be functional:

a. At least once per 18 months by a visual inspection.

b. Prior to returning a penetration fire barrier to functional status following repairs or maintenance by performance of a visual inspection of the affected penetration fire barrier(s).

3/4.8 ELECTRICAL POWER SYSTEMS

3/4.8.1 A.C. SOURCES

OPERATING

LIMITING CONDITION FOR OPERATION

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

a. Two physically independent circuits between the offsite transmission network to the switchyard and two physically independent circuits from the switchyard to the onsite Class 1E distribution system, and

b. Two separate and independent diesel generator sets (Set A: DG 1-2A and DG-1C, Set B: DG-1B and DG-2C) each with:

1. Separate day tanks containing a minimum volume of 900 gallons of fuel for the 4075 kw diesel generators and 700 gallons of fuel for the 2850 kw diesel generator.

2. A separate fuel transfer pump for each diesel.

c. A fuel storage system consisting of four, independent storage tanks each containing a minimum of 25,000 gallons of fuel.*

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

a. With an offsite circuit inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirements 4.8.1.1.1.a and 4.8.1.1.2.a.4 within one hour and at least once per 8 hours thereafter; restore at least two offsite circuits 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.

b. With one diesel generator set inoperable, demonstrate the operability of the remaining A.C. sources by performing Surveillance Requirements 4.8.1.1.1.a and 4.8.1.1.2.a.4 within one hour and at least once per 8 hours thereafter. Restore both diesel generator sets to OPERABLE status within 72 hours or comply with the following:

1) Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

*One inoperable fuel storage tank is equivalent to one inoperable diesel generator set.

ACTION (Continued)

2) One diesel generator set may be made inoperable for up to 14 days to perform scheduled maintenance and testing on diesel generators 1C (or 2C) provided all the following are satisfied:

a) Unit 1 is in MODE 5 or 6 and appropriate technical specifications covering the diesel generator sets are satisfied.

b) The remaining Unit 2 diesel generators 1-2A, 1-2B, 1C (or 2C) are OPERABLE.

c) The service water system is recirculated to the pond and surveillance requirement 4.7.6.2.1 is verified prior to removing 1C (or 2C) from service and once per 8 hours thereafter.

d) Diesel Generator 1C (or 2C) is returned to OPERABLE status as soon as maintenance is completed.

Otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

c. With one offsite circuit and one diesel generator set of the above required A.C. electrical power sources inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirements 4.8.1.1.1.a and 4.8.1.1.2.a.4 within one hour and at least once per 8 hours thereafter; restore at least one of the inoperable sources to OPERABLE status within 12 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Restore at least two offsite circuits and both diesel generator sets to OPERABLE status within 72 hours from the time of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

d. With two of the above required offsite A.C. circuits inoperable, demonstrate the OPERABILITY of both diesel generator sets by performing Surveillance Requirement 4.8.1.1.2.a.4 within one hour and at least once per 8 hours thereafter, unless the diesel generators are already operating; restore at least one of the inoperable offsite sources to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours. With only one offsite source restored, restore both offsite circuits to OPERABLE status within 72 hours from time of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

ACTION: (Continued)

e. With both of the above required diesel generator sets inoperable, demonstrate the OPERABILITY of two offsite A.C. circuits by performing Surveillance Requirement 4.8.1.1.1.a within 1 hour and at least once per 8 hours thereafter; restore at least one of the inoperable diesel generator sets to OPERABLE status within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Restore both diesel generator sets to OPERABLE status within 72 hours from time of initial loss or be in least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.8.1.1.1 Each of the above independent circuits between the offsite transmission network and the onsite Class 1E distribution system shall be:

a. Determined OPERABLE at least once per 7 days by verifying correct breaker alignments, indicated power availability, and

b. Demonstrated OPERABLE at least once per 18 months during shutdown by transferring unit power supply from the normal circuit to the alternate circuit.

4.8.1.1.2 Each diesel generator set shall be demonstrated OPERABLE:

a. At least once per 31 days, on a STAGGERED TEST BASIS, by:

1. Verifying the fuel level in the day tank,

2. Verifying the fuel level in the fuel storage tanks,

ELECTRICAL POWER SYSTEMS

3/4.8.2 ONSITE POWER DISTRIBUTION SYSTEMS

A.C. DISTRIBUTION - OPERATING

LIMITING CONDITION FOR OPERATION

3.8.2.1 The following A.C. electrical busses shall be OPERABLE, energized and aligned to an OPERABLE diesel generator:

4160 volt Emergency Bus F, H and K

4160 volt Emergency Bus G, J and L

600 volt Load Centers D, H, K and R

600 volt Load Centers E, J, L and S

120 volt A.C. Vital Bus A

120 volt A.C. Vital Bus B

120 volt A.C. Vital Bus C

120 volt A.C. Vital Bus D

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With less than the above complement of A.C. busses OPERABLE, restore the inoperable bus to OPERABLE status within 8 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.8.2.1 The specified A.C. busses shall be determined OPERABLE and energized at least once per 7 days by verifying correct breaker alignment and indicated power availability.

ELECTRICAL POWER SYSTEMS

A.C. DISTRIBUTION - SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.2.2 As a minimum, the following train oriented A.C. electrical busses shall be OPERABLE and aligned to an OPERABLE diesel generator.

3 - 4160 volt Emergency Bus

4 - 600 volt Load Centers

2 - 120 volt A.C. Vital Busses

APPLICABILITY: MODES 5 and 6.

ACTION:

With less than the above complement of A.C. busses OPERABLE and energized, establish CONTAINMENT INTEGRITY within 8 hours.

SURVEILLANCE REQUIREMENTS

4.8.2.2 The specified A.C. busses shall be determined OPERABLE and energized at least once per 7 days by verifying correct breaker alignment and indicated power availability.

ELECTRICAL POWER SYSTEMS

AUXILIARY BUILDING D.C. DISTRIBUTION - OPERATING

LIMITING CONDITION FOR OPERATION

3.8.2.3 The following D.C. distribution systems shall be OPERABLE and energized:

TRAIN "A" consisting of 125-volt D.C. bus No. 1A, 125-volt battery bank No. 1A and a full capacity charger.

TRAIN "B" consisting of 125-volt D.C. bus No. 1B, 125-volt battery bank No. 1B and a full capacity charger.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one 125-volt D.C. train inoperable or not energized, restore the inoperable train to OPERABLE and energized status within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.8.2.3.1 Each D.C. train shall be determined OPERABLE and energized at least once per 7 days by verifying correct breaker alignment and indicated voltage on the bus.

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

a. At least once per 7 days by verifying that:

1. The electrolyte level of each pilot cell is between the minimum and maximum level indication marks,

2. The pilot cell specific gravity, corrected to 77°F and full electrolyte level, is greater than or equal to 1.190, and

3. The pilot cell voltage is greater than or equal to 2.02 volts.

b. At least once per 92 days by verifying that:

1. The electrolyte level of each cell is between the minimum and maximum level indication marks,

SURVEILLANCE REQUIREMENTS (Continued)

~~2. The average specific gravity of all connected cells, corrected to 77°F and full electrolyte level, is greater than or equal to 1.190,~~

2 b. The voltage of each connected cell is greater than or equal to 2.02 volts under float charge and has not decreased more than 0.1 ~~0.05~~ volts from the value observed during the original acceptance test,

3 a. The specific gravity, corrected to 77°F and full electrolyte level, of each connected cell is greater than or equal to 1.190 and has not decreased more than 0.08 from the value observed during the previous test,

4 a. The total battery terminal voltage is greater than or equal to 121.2 volts, and

~~6. The battery load (charger current) with the battery on float charge is less than 1.0 amps.~~

c. At least once per 18 months by verifying that:

1. The cells, cell plates and battery racks show no visual indication of physical damage or abnormal deterioration,

2. The cell-to-cell and terminal connections are clean, tight, and coated with anti-corrosion material,

~~3. The resistance of each cell-to-cell and terminal connection is less than or equal to 0.01 ohms, and~~

3 b. The battery charger will supply at least 536 amperes at $\geq$ 125 volts for at least 4 hours.

d. At least once per 18 months, during shutdown, by verifying that the battery capacity is adequate to supply and maintain in OPERABLE status all of the actual emergency loads for 2 hours when the battery is subjected to a battery service test or the individual cell voltage does not decrease below 1.75 volts when the battery is subjected to the following equivalent load profile.

Order In Which Loads Are Applied	Current (amps)	Duration (min.)
1	920	1
2	430	58
3	920	1
4	430	59
5	920	1

SURVEILLANCE REQUIREMENTS (Continued)

e. At least once per 60 months, during shutdown, by verifying that the battery capacity is at least 80% of the manufacturer's rating when subjected to a performance discharge test. This performance discharge test shall be performed subsequent to the satisfactory completion of the required battery service test.

ELECTRICAL POWER SYSTEMS

AUXILIARY BUILDING D.C. DISTRIBUTION - SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.2.4 As a minimum, one D.C. distribution system consisting of the following shall be OPERABLE and energized:

1 - 125-volt D.C. bus, and

1 - 125-volt battery bank and full capacity charger associated with the above D.C. bus.

APPLICABILITY: MODES 5 and 6.

ACTION:

With less than the above complement of D.C. equipment and bus OPERABLE and energized, establish CONTAINMENT INTEGRITY within 8 hours.

SURVEILLANCE REQUIREMENTS

4.8.2.4.1 The above required 125-volt D.C. bus shall be determined OPERABLE and energized at least once per 7 days by verifying correct breaker alignment and indicated voltage on the bus with an overall voltage of greater than or equal to 121.2 volts.

4.8.2.4.2 The above required 125-volt battery bank and charger shall be demonstrated OPERABLE per Surveillance Requirement 4.8.2.3.2.

ELECTRICAL POWER SYSTEMS

SERVICE WATER BUILDING D.C. DISTRIBUTION - OPERATING

LIMITING CONDITION FOR OPERATION

3.8.2.5 The following D.C. distribution systems shall be energized and OPERABLE:

TRAIN "A" consisting of 125-volt D.C. Distribution Cabinet 1ZM, 125-volt battery bank No. 1 and a full capacity charger.

TRAIN "B" consisting of 125-volt D.C. Distribution Cabinet 1ZN, 125-volt battery bank No. 2 and a full capacity charger.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one 125-volt D.C. distribution system inoperable, restore the inoperable distribution system to OPERABLE and energized status within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.8.2.5.1 Each D.C. bus train shall be determined OPERABLE and energized at least once per 7 days by verifying correct breaker alignment and indicated power availability with an overall voltage of greater than or equal to 121.2 volts.

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

a. At least once per 7 days by verifying that:

1. The electrolyte level of each pilot cell is between the minimum and maximum level indication marks,

2. The pilot cell specific gravity, corrected to 77°F and full electrolyte level, is greater than or equal to 1.190, and

3. The pilot cell voltage is greater than or equal to 2.02 volts.

b. At least once per 92 days by verifying that:

1. The electrolyte level of each cell is between the minimum and maximum level indication marks,

SURVEILLANCE REQUIREMENTS (Continued)

~~2. The average specific gravity of all connected cells, corrected to 77°F and full electrolyte level, is greater than or equal to 1.190.~~

2 3. The voltage of each connected cell is greater than or equal to 2.02 volts under float charge and has not decreased more than 0.1 ~~0.05~~ volts from the value observed during the original acceptance test,

3 4. The specific gravity, corrected to 77°F and full electrolyte level, of each connected cell is greater than or equal to 1.190 and has not decreased more than 0.08 from the value observed during the previous test,

4 5. The total battery terminal voltage is greater than or equal to 121.2 volts, and

~~6. The battery load (charger current) with the battery on float charge is less than 1.0 amps.~~

c. At least once per 18 months by verifying that:

1. The cells, cell plates and battery racks show no visual indication of physical damage or abnormal deterioration,

2. The cell-to-cell and terminal connections are clean, tight, and coated with anti-corrosion material,

~~3. The resistance of each cell-to-cell and terminal connection is less than or equal to 0.5 ohms, and~~

3 4. The battery charger will supply at least 3 amperes at $\geq$ 125 volts for at least 4 hours.

d. At least once per 18 months, during shutdown, by verifying that the battery capacity is adequate to supply and maintain in OPERABLE status all of the actual emergency loads for 2 hours when the battery is subjected to a battery service test or the individual cell voltage does not decrease below 1.75 volts when the battery is subjected to the following equivalent load profile:

Order in Which Loads are Applied	Currrent (amps)	Duration
1	25	0 - 0.1 sec
2	1	0.1 - 2 hours

SURVEILLANCE REQUIREMENTS (Continued)

e. At least once per 60 months, during shutdown, by verifying that the battery capacity is at least 80% of the manufacturer's rating when subjected to a performance discharge test. This performance discharge test shall be performed subsequent to the satisfactory completion of the required battery service test.

The maximum peak pressure expected to be obtained from a LOCA event is 45 psig. The limit of 3 psig for initial positive containment pressure will limit the total pressure to 48 psig which is less than design pressure and is consistent with the accident analyses.

3/4.6.1.5 AIR TEMPERATURE

The limitations on containment average air temperature ensure that the overall containment average air temperature does not exceed the initial temperature condition assumed in the accident analysis for a LOCA or steam line break accident.

3/4.6.1.6 CONTAINMENT STRUCTURAL INTEGRITY

This limitation ensures that the structural integrity of the containment will be maintained comparable to the original design standards for the life of the facility. Structural integrity is required to ensure that the containment will withstand the maximum pressure of 48 psig in the event of a LOCA. The visual examination of tendons, anchorages and exposed interior and exterior surfaces of the containment, and the Type A leakage test, ~~along with the data obtained from Unit 1 tendon surveillance,~~ is sufficient to demonstrate this capability. measurement of the containment lift off force,

The surveillance requirements for demonstrating the containment's structural integrity are in compliance with the recommendations of paragraph C.1.3 of Regulatory Guide 1.35 "Inservice Surveillance of Ungrouted Tendons in Prestressed Concrete Containment Structures," January 1976.

3/4.6.1.7 CONTAINMENT VENTILATION SYSTEM

The 48-inch containment purge supply and exhaust isolation valves are required to be closed during plant operation since these valves have not been demonstrated capable of closing during a LOCA or steam line break accident. Maintaining these valves closed during plant operations ensures that excessive quantities of radioactive materials will not be released via the containment purge system.

The use of the containment purge lines is restricted to the 18-inch purge supply and exhaust isolation valves to ensure that the site boundary dose guidelines of 10 CFR Part 100 would not be exceeded in the event of a loss-of-coolant accident during purging operations.

The surveillance requirements provide assurance that the minimum OPERABILITY requirements of the fire suppression systems are met.

In the event the fire suppression water system becomes inoperable, immediate corrective measures must be taken since this system provides the major fire suppression capability of the plant. The requirement for a twenty-four hour report to the Commission provides for prompt evaluation of the acceptability of the corrective measures to provide adequate fire suppression capability for the continued protection of the nuclear plant.

3/4.7.12 FIRE BARRIER PENETRATIONS

The functional integrity of the fire barrier penetrations ensures that fires will be confined or adequately retarded from spreading to adjacent portions of the facility. This design feature minimizes the possibility of a single fire rapidly involving several areas of the facility prior to detection and extinguishment. The fire barrier penetrations are a passive element in the facility fire protection program and are subject to periodic inspections.

Fire barrier penetrations are considered functional when the visually observed condition is the same as the as-designed condition. For those fire barrier penetrations that are not in the as-designed condition, an evaluation shall be performed to show that the modification has not degraded the fire rating of the fire barrier penetration.

During periods of time when a barrier is not functional, either, 1) a continuous fire watch is required to be maintained in the vicinity of the affected barrier, or 2) the fire detectors on at least one side of the affected barrier must be verified OPERABLE and an hourly fire watch patrol established, until the barrier is restored to functional status.

~~3/4.7.13 AREA TEMPERATURE MONITORING~~

~~The area temperature limitations ensure that safety-related equipment will not be subjected to temperatures in excess of their environmental qualification temperatures. Exposure to excessive temperatures may degrade equipment and can cause a loss of its OPERABILITY. The temperature limits include an allowance for instrument error of 2°F.~~

PROBLEMS ASSOCIATES WITH UNIT 1
IF UPDATED IDENTICALLY TO UNIT 2

	PAGE	SPECIFICATION		DESCRIPTION
1.	3/4 0-1	3.0.3 (Motherhood)	Issue:	APC's preference is for action requirements to start at time of initial discovery of failure rather than time of failure. No NRC generic requirement to incorporate in operating plants.
			Resolution:	APC wishes to withdraw this request from further consideration. However, APC will interpret action requirements to start at time of initial discovery of failure as discussed with NRC staff on 9/18/81.
2.	3/4 0-2	4.0.3 (Motherhood)	Issue:	Allows APC to perform surveillance prior to declaring equipment inoperable, i.e., if surveillance test was not performed on time, then surveillance can be performed rather than declaring equipment inoperable. No NRC generic requirement to incorporate in operating plants.
			Resolution:	See Attachment III.
3.	3/4 3-4	Table 3.3-1 Item 20 (Reactor Trip System Interlocks)	Issue:	APC proposes to make 3.0.4 not applicable to ACTION STATEMENT 8 which is for the Reactor Trip System Interlocks. No safety analysis invalidated by change. Only by making 3.0.4 not applicable to reactor trips would invalidate safety analyses.
			Resolution:	APC wishes to withdraw this request from further consideration.
4.	3/4 3-19 3-20 3-23	Table 3.3-3 Item 4 (Steam Line Isolation Actuation)	Issue:	APC prefers to make Steam Line Isolation not applicable in modes 2 and 3 if MSIVs are closed. This is a common sense approach. The current Specification would require a change to a lower mode to perform instrumentation maintenance in some situations even if the MSIVs are shut.
			Resolution:	NRC agreed with APC provided Spec. 3.7.1.5 is modified to preclude operation in Mode 1 with one MSIV inoperable. These tech. spec. changes are proposed in Attachment 1.

	PAGE	SPECIFICATION		DESCRIPTION
5.	3/4 3-19	Table 3.3-3 Item 4.d (Steam Line Isolation Actuation)	Issue:	APC prefers to add bypass below P-12 for Tavg. Low-Low. Same argument as Item No. 4.
			Resolution:	APC wishes to withdraw this request from further consideration.
6.	3/4 3-22	Table 3.3-3 Item 8 (ESF Interlocks)	Issue:	APC prefers to add 3.0.4 not applicable to ACTION STATEMENTS 20 and 13 which are for the ESF System Interlocks. Same argument as Item 3.
			Resolution:	APC wishes to withdraw this request from further consideration.
7.	3/4 3-36	Table 4.3-2 Item 6.a (Aux. Feed Actuation)	Issue:	APC wants to exclude automatic actuation logic for trip of main feedwater pumps for auto start of AFW. Accident analysis does not take credit for this start signal. FNP design does not allow testing via solid state protection system. Cannot be tested at power.
			Resolution:	NRC agreed with APC provided this portion of automatic actuation logic is tested as part of Item 6.e which it is. See Tech. Spec. changes proposed in Attachment 1.
8.	3/4 3-49	3.3.3.5 HSP Instruments	Issue:	NRC Proposes to reduce LCO ACTION STATEMENT from 31 days to 7 days. No NRC generic requirement to incorporate into operating plant.
			Resolution:	See Attachment III.
9.	3/4 3-57	Table 3.3-11 (Accident Monitoring	Issue:	APC prefers to utilize pressurizer SV discharge temperature if limit switch fails to extend LCO to 7 days since only one limit switch is available. Logical approach to allow operation until weekend to repair since backup indication exists and only one limit switch installed.
			Resolution:	NRC agreed with APC. See Tech. Spec. changes proposed in Attachment I.
10.	3/4 3-72 3-73 (Unit 2 only)	3.3.4 (Turbine Overspeed Protection)	Issue:	No NRC generic requirement to incorporate into operating plant.
			Resolution:	NRC agreed not to incorporate this Tech. Spec. as part of Unit 1 upgrade.

	PAGE	SPECIFICATION		DESCRIPTION
11.	3/4 4-8	3.4.5 (PORV Block Valves)	Issue:	APC prefers to perform surveillance test in CSD, if not perfo[illegible] the previous 92 days, to preclude blowing valve packing whil[illegible] operating.
			Resolution:	See Attachment III.
12.	3/4 6-8	3.6.1.6 (Containment Tendon Surveillance)	Issue:	APC prefers the following for tendons: 1. Acceptance criteria to be above 40-year limit rather than predict limit because 40-year limit is the design limit for the tendons. 2. Only detension one in each group (dome, vertical, hoop). Detensioning tends to be counter-productive and enhances the probability of damaging individual wires without gaining any significant information from the process.
			Resolution:	APC wishes to withdraw this request from further consideration at this time. However, APC considers this as an important issue and will file a separate license amendment request on this issue in the near future.
13.	3/4 7-13	3.7.5 (River Water System)	Issue:	APC prefers seven days to three days for the ACTION STATEMENT because FNP has closed service water system and pond for ultimate heat sink. This is consistent with action times for other similar safety related systems.
			Resolution:	NRC agreed with APC.
14.	3/4 7-21 7-22 7-23 7-24	3.7.9 (Snubbers)	Issue:	APC prefers the following for snubbers: 1. NRC 120-day letter response. 2. Acceptance criteria for mechanical snubbers to allow manual testing. (No test equipment is available.) 3. APC prefers to limit engineering evaluation to those snubbers that are locked up. Also to limit evaluation to component rather than system.
			Resolution:	See Attachment III.

	PAGE	SPECIFICATION		DESCRIPTION
15.	3/4 7-85 7-88 7-94 B3/4 7-7	3.7.11 (Fire Protection)	Issue: Resolution:	APC prefers to utilize a fire patrol vs. a continuous fire watch. APC wishes to withdraw this request from further consideration at this time. However, APC considers this as an important issue and will file a separate license amendment request on this issue in the near future. Proposed Tech. Specs. consistent with the Unit 2 version are provided in Attachment I.
16.	3/4 7-65 7-66 (Unit 2 only)	3.7.13 (Area Temperature Monitoring)	Issue: Resolution:	No NRC generic requirement to incorporate into operating plant. NRC agreed not to incorporate this Tech. Spec. as part of Unit 1 upgrade.
17.	3/4 8-1 thru 3/4 8-8 B3/4 8-1 (Unit 2 only)	3.8.1.1 3.8.1.2 (Diesel Generators)	Issue: Resolution:	No NRC generic requirement to incorporate into operating plant. NRC agreed not to incorporate this Tech. Spec. as part of Unit 1 upgrade.
18.	3/4 8-9 8-10 (Unit 2 only)	3.8.2.1 3.8.2.2 (Inverters)	Issue: Resolution:	No NRC generic requirement to incorporate into operating plant. NRC agreed not to incorporate this Tech. Spec. as part of Unit 1 upgrade. APC will address upon receipt of generic NRC letter.
19.	3/4 8-12 8-16 B3/4 8-1 (Unit 2 only)	4.8.2.3.2 4.8.2.5.2 (Batteries)	Issue: Resolution:	No NRC generic requirement to incorporate into operating plant. NRC agreed not to incorporate this Tech. Spec. as part of Unit 1 upgrade. APC will address upon receipt of generic NRC letter.
20.	3/4 8-18 thru 3/4 8-28 (Unit 2 only)	3.8.3.1 (Containment Penetration Overcurrent Protection Devices)	Issue: Resolution:	No NRC generic requirement to incorporate into operating plant. NRC agreed not to incorporate this Tech. Spec. as part of Unit 1 upgrade.
21.	3/4 8-29 thru 3/4 8-32 (Unit 2 only)	3.8.3.2 (MOV Thermal Overload Protection Devices)	Issue: Resolution:	No NRC generic requirement to incorporate into operating plant. NRC agreed not to incorporate this Tech. Spec. as part of Unit 1 upgrade.

	PAGE	SPECIFICATION	DESCRIPTION
22.	3/4 11-15	3.11.2.5	Issue: APC prefers to change 1 hour to immediately. It may take more than 1 hour to reduce oxygen content. Logical change that reduction of O_2 should start immediately; however, may be impossible to meet specification within 1 hour.
			Resolution: APC withes to withdraw this request from further consideration.

/de

ATTACHMENT III

FNP-1 TECHNICAL SPECIFICATION UPGRADE

OUTSTANDING ITEMS

Item	Page	Specification	Issue/Proposed Solution
2	3/4 0-2	4.0.3 (Motherhood)	Issue: The proposed NRC version of this technical specification requires that if surveillance is not performed in the allotted time interval then equipment should be declared inoperable. If the utility gets into a problem then an emergency technical specification should be approved by the NRC. A potential problem created by this proposed technical specification is that inadequate time may exist to perform the surveillance requirements before the ACTION STATEMENT requires a shutdown. For example, if the boron injection tank surveillance is not performed on time (Section 4.5.4.1.b), the tank would be declared inoperable and the ACTION STATEMENT would require completion of the surveillance within one hour or be in HOT STANDBY. Previous operating experience indicates that the surveillance requirement of verifying boron concentration in less than one hour can not be assured. Therefore, any time the surveillance test is missed on certain pieces of equipment (e.g., boron injection tank, refueling water storage tank, ECCS accumulators, etc.), the proposed technical specification would likely require a shutdown due to the impracticality of obtaining an emergency change to the technical specifications in this timeframe. In practive, the equipment has simply not been tested and would likely be found satisfactory if the surveillance tests were performed. Proposed Solution: APC proposes to use the current Unit 1 version of Spec. 4.0.3 that allows the surveillance test to be performed prior to declaring the equipment inoperable. This would eliminate unnecessary shutdown of the Unit. There is no generic requirement to incorporate the NRC proposed technical specification into operating plant requirements.
8	3/4 3-49	3.3.3.5 (Instruments HSP)	Issue: The proposed technical specification would reduce the LCO ACTION STATEMENT from 31 days to 7 days. This would not allow much time to correct instrument problems before the plant would have to be shutdown. There is no generic requirement to incorporate this change into operating plant requirements. Proposed Solution: APC proposes to maintain the UNIT 1 LCO ACTION time of 31 days on the basis that other operating plants are allowed 31 days. Also, the probability of an instrument failure in the Hot Shutdown Panel (HSP) coincident with control room evacuation during a 31-day period is extremely small. Therefore, the 7-day restriction does not appear to be justified.

Item	Page	Specification	Issue/Proposed Solution
11	3/4 4-8	3.4.5 (PORV Block Valve)	Issue: The proposed technical specification requires stroke testing of the PORV block valve every 92 days. This could cause problems since the valve is not normally cycled that often and the testing could result in blowing the valve packing while the plant is operating. NRC indicates that this surveillance requirement should be part of the inservice testing program (Section 4.0.5) and therefore any exemption to the surveillance schedule must be submitted per 10 CFR 50, Section 50.55 a(g)(6)(i). Proposed Solution: The presently NRC-approved inservice testing program does not include the PORV block valve and therefore 10 CFR 50, Section 50.55 a(g)(6)(i) does not apply. In lieu of the NRC schedule, APC proposes that the block valve be surveillance tested only during cold shutdown (CSD).
14	3/4 7-21 7-23	3.7.9	Issue: Alabama Power Company requests the use of a qualitative rather than quantitative acceptance criteria for the functional testing of mechanical snubbers rated less than 350 pounds since the equipment required to do the quantitative type of testing is not commercially available. In addition, Alabama Power Company estimates that this type of testing would add approximately three weeks to each refueling outage. Alabama Power Company also requests that snubbers with rated capacities greater than 50,000 pounds be excluded from functional testing due to the impracticality of testing large, difficult-to-remove snubbers. Proposed Solution: Alabama Power Company proposes to use a qualitative type of acceptance criteria for snubbers rated less than 350 pounds as specified in the Technical Specifications proposed in Attachment 1. Secondly, an exclusion statement for snubbers with a rating greater than 50,000 pounds has been proposed in Attachment 1. In addition, Alabama Power Company proposes to delay the implementation of Specification 4.7.9.e until startup following the first refueling outage or when a commercial in-place testing device is available, whichever is later.