

ATTACHMENT TO LICENSE AMENDMENT NO. 79

FACILITY OPERATING LICENSE NO. NPF-58

DOCKET NO. 50-440

Replace the following pages of the Appendix "A" Technical Specifications including the issued but not yet implemented Improved Technical Specifications (ITS) with the attached pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change.

Remove

1-1
3/4 3-23
3/4 3-24
3/4 3-25
3/4 3-26

ITS 3.3-53
--
ITS 3.3-54
ITS 3.3-56
ITS 3.3-57
ITS 3.3-58
ITS 3.3-59
ITS B3.3-170
ITS B3.3-172

Insert

1-1
3/4 3-23
3/4 3-24
3/4 3-25
3/4 3-26

ITS 3.3-53
ITS 3.3-53a
ITS 3.3-54
ITS 3.3-56
ITS 3.3-57
ITS 3.3-58
ITS 3.3-59
ITS B3.3-170
ITS B3.3-172
ITS B3.3-172a

1.0 DEFINITIONS

The following terms are defined so that uniform interpretation of these specifications may be achieved. The defined terms appear in capitalized type and shall be applicable throughout these Technical Specifications.

ACTION

1.1 ACTION shall be that part of a Specification which prescribes remedial measures required under designated conditions.

AVERAGE PLANAR EXPOSURE

1.2 The AVERAGE PLANAR EXPOSURE shall be applicable to a specific planar height and is equal to the sum of the exposure of all the fuel rods in the specified bundle at the specified height divided by the number of fuel rods in the fuel bundle.

AVERAGE PLANAR LINEAR HEAT GENERATION RATE

1.3 The AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR) shall be applicable to a specific planar height and is equal to the sum of the LINEAR HEAT GENERATION RATES for all the fuel rods in the specified bundle at the specified height divided by the number of fuel rods in the fuel bundle.

CHANNEL CALIBRATION

1.4 A CHANNEL CALIBRATION shall be the adjustment, as necessary, of the channel output such that it responds with the necessary range and accuracy to known values of the parameter which the channel monitors. The CHANNEL CALIBRATION shall encompass the entire channel including the sensor and alarm and/or trip functions, and shall include the CHANNEL FUNCTIONAL TEST. The CHANNEL CALIBRATION may be performed by any series of sequential, overlapping or total channel steps such that the entire channel is calibrated.

CHANNEL CHECK

1.5 A CHANNEL CHECK shall be the qualitative assessment of channel behavior during operation by observation. This determination shall include, where possible, comparison of the channel indication and/or status with other indications and/or status derived from independent instrument channels measuring the same parameter.

CHANNEL FUNCTIONAL TEST

1.6 A CHANNEL FUNCTIONAL TEST shall be:

- a. Analog/digital channels - the injection of a simulated signal into the channel as close to the sensor as practicable to verify OPERABILITY including alarm and/or trip functions and channel failure trips.
- b. Bistable channels - the injection of a simulated signal into the sensor to verify OPERABILITY including alarm and/or trip functions.

The CHANNEL FUNCTIONAL TEST may be performed by any series of sequential, overlapping or total channel steps such that the entire channel is tested.

TABLE 4.3.2.1-1

ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>TRIP FUNCTION</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>CHANNEL CALIBRATION</u>	<u>OPERATIONAL CONDITIONS IN WHICH SURVEILLANCE REQUIRED</u>
1. <u>PRIMARY CONTAINMENT ISOLATION</u>				
a. Reactor Vessel Water Level - Low, Level 2	S	Q	R ^(b)	1, 2, 3 and #
b. Drywell Pressure - High ##	S	Q	R ^(b)	1, 2, 3
c. Containment and Drywell Purge Exhaust Plenum Radiation - High	S	Q	R	1, 2, 3 and *
d. Reactor Vessel Water Level - Low, Level 1	S	Q	R ^(b)	1, 2, 3 and #
e. Manual Initiation	NA	R	NA	1, 2, 3 and *
2. <u>MAIN STEAM LINE ISOLATION</u>				
a. Reactor Vessel Water Level - Low, Level 1	S	Q	R ^(b)	1, 2, 3
b. Main Steam Line Radiation - High	S	Q	R	***
c. Main Steam Line Pressure - Low	S	Q	R ^(b)	1
d. Main Steam Line Flow - High	S	Q	R ^(b)	1, 2, 3
e. Condenser Vacuum - Low	S	Q	R ^(b)	1, 2**, 3**
f. Main Steam Line Tunnel Temperature - High				
1. Division 1 and 2	S	SA	R	1, 2, 3
2. Division 3 and 4	S	Q	R	1, 2, 3
g. Main Steam Line Tunnel Δ Temperature - High				
1. Division 1 and 2	S	SA	R	1, 2, 3
2. Division 3 and 4	S	Q	R	1, 2, 3
h. Turbine Building Main Steam Line Temperature - High	S	Q	R	1, 2, 3
i. Manual Initiation	NA	R	NA	1, 2, 3

TABLE 4.3.2.1-1 (Continued)ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>TRIP FUNCTION</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>CHANNEL CALIBRATION</u>	<u>OPERATIONAL CONDITIONS IN WHICH SURVEILLANCE REQUIRED</u>
3. <u>SECONDARY CONTAINMENT ISOLATION</u>				
a. Reactor Vessel Water Level - Low, Level 2	S	Q	R ^(b)	1, 2, 3 and #
b. Drywell Pressure - High ##	S	Q	R ^(b)	1, 2, 3
c. Manual Initiation	NA	R	NA	1, 2, 3 and *
4. <u>REACTOR WATER CLEANUP SYSTEM ISOLATION</u>				
a. Δ Flow - High	S	Q	R	1, 2, 3
b. Δ Flow Timer	NA	Q	R	1, 2, 3
c. Equipment Area Temperature - High	S	SA	R	1, 2, 3
d. Equipment Area Ventilation Δ Temperature - High	S	SA	R	1, 2, 3
e. Reactor Vessel Water Level - Low, Level 2	S	Q	R ^(b)	1, 2, 3
f. Main Steam Line Tunnel Ambient Temperature - High	S	SA	R	1, 2, 3
g. Main Steam Line Tunnel Δ Temperature - High	S	SA	R	1, 2, 3
h. SLCS Initiation	NA	Q ^(a)	NA	1, 2, 3
i. Manual Initiation	NA	R	NA	1, 2, 3

TABLE 4.3.2.1-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>TRIP FUNCTION</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>CHANNEL CALIBRATION</u>	<u>OPERATIONAL CONDITIONS IN WHICH SURVEILLANCE REQUIRED</u>	
5. <u>REACTOR CORE ISOLATION COOLING SYSTEM ISOLATION</u>					
a. RCIC Steam Line Flow - High	S	Q	R ^(b)	1, 2, 3	
b. RCIC Steam Supply Pressure - Low	S	Q	R ^(b)	1, 2, 3	
c. RCIC Turbine Exhaust Diaphragm Pressure - High	S	Q	R ^(b)	1, 2, 3	
d. RCIC Equipment Room Ambient Temperature - High	S	SA	R	1, 2, 3	
e. Deleted					
f. Main Steam Line Tunnel Ambient Temperature - High	S	SA	R	1, 2, 3	
g. Main Steam Line Tunnel Δ Temperature - High	S	SA	R	1, 2, 3	
h. Main Steam Line Tunnel Temperature Timer	NA	SA	R	1, 2, 3	
i. RHR Equipment Room Ambient Temperature - High	S	SA	R	1, 2, 3	
j. RHR Equipment Room Δ Temperature - High	S	SA	R	1, 2, 3	
k. RCIC Steam Line Flow High Timer	NA	Q	R	1, 2, 3	
l. Drywell Pressure - High	S	Q	R ^(b)	1, 2, 3	
m. Manual Initiation	NA	R	NA	1, 2, 3	

TABLE 4.3.2.1-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>TRIP FUNCTION</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>CHANNEL CALIBRATION</u>	<u>OPERATIONAL CONDITIONS IN WHICH SURVEILLANCE REQUIRED</u>
6. <u>RHR SYSTEM ISOLATION</u>				
a. RHR Equipment Area Ambient Temperature - High	S	SA	R	1, 2, 3
b. RHR Equipment Area Δ Temperature - High	S	SA	R	1, 2, 3
c. RHR/RCIC Steam Line Flow - High	S	Q	R ^(b)	1, 2, 3
d. Reactor Vessel Water Level - Low, Level 3 ##	S	Q	R ^(b)	1, 2, 3
e. Reactor Vessel (RHR Cut-in Permissive) Pressure - High	S	Q	R ^(b)	1, 2, 3
f. Drywell Pressure - High ##	S	Q	R ^(b)	1, 2, 3
g. Manual Initiation	NA	R	NA	1, 2, 3

* When handling irradiated fuel in the primary containment and during CORE ALTERATIONS and operations with a potential for draining the reactor vessel.

** When any turbine stop valve is greater than 90% open and/or the key locked bypass switch is in the normal position.

*** OPERATIONAL CONDITION 1 or 2 when the mechanical vacuum pump lines are not isolated.

During CORE ALTERATION and operations with a potential for draining the reactor vessel.

(a) Each train or logic channel shall be tested at least every other 92 days.

(b) Calibrate trip unit setpoint at least once per 92 days.

These Trip Functions (1b, 3b, 6d, and 6f) utilize instruments which are common to RPS instrumentation.

SURVEILLANCE REQUIREMENTS

- NOTES-----
1. Refer to Table 3.3.6.1-1 to determine which SRs apply for each Function.
 2. When a channel is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed for up to 6 hours, provided the associated Function maintains isolation capability.
-

SURVEILLANCE		FREQUENCY
SR 3.3.6.1.1	Perform CHANNEL CHECK.	12 hours
SR 3.3.6.1.2	<p>-----NOTE----- For Function 1.e in Table 3.3.6.1-1, this SR is applicable only to the Division 3 and 4 instruments. -----</p> <p>Perform CHANNEL FUNCTIONAL TEST.</p>	92 days
SR 3.3.6.1.3	Calibrate the trip unit.	92 days
SR 3.3.6.1.4	Perform CHANNEL CALIBRATION.	18 months
SR 3.3.6.1.5	Perform LOGIC SYSTEM FUNCTIONAL TEST.	18 months
SR 3.3.6.1.6	Verify the ISOLATION SYSTEM RESPONSE TIME for the main steam isolation valves is within limits.	18 months on a STAGGERED TEST BASIS

(continued)

Primary Containment and Drywell Isolation Instrumentation
3.3.6.1

SURVEILLANCE	FREQUENCY
<p>SR 3.3.6.1.7 -----NOTE----- For Function 1.e in Table 3.3.6.1-1, this SR is applicable only to the Division 1 and 2 instruments. ----- Perform CHANNEL FUNCTIONAL TEST.</p>	<p>184 days</p>

Primary Containment and Drywell Isolation Instrumentation
3.3.6.1

Table 3.3.6.1-1 (page 1 of 6)
Primary Containment and Drywell Isolation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION C.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. Main Steam Line Isolation					
a. Reactor Vessel Water Level - Low Low Low, Level 1	1,2,3	2	D	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5 SR 3.3.6.1.6	≥ 14.3 inches
b. Main Steam Line Pressure - Low	1	2	E	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5 SR 3.3.6.1.6	≥ 795.0 psig
c. Main Steam Line Flow - High	1,2,3	2 per MSL	D	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5 SR 3.3.6.1.6	≤ 191 psid
d. Condenser Vacuum - Low	1,2 ^(a) , 3 ^(a)	2	D	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≥ 7.6 inches Hg vacuum
e. Main Steam Line Pipe Tunnel Temperature - High	1,2,3	2	D	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.5 SR 3.3.6.1.7	≤ 158.9°F
f. Main Steam Line Turbine Building Temperature-High	1,2,3	2	D	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 138.9°F
g. Manual Initiation	1,2,3	2	G	SR 3.3.6.1.5	NA
2. Primary Containment and Drywell Isolation					
a. Reactor Vessel Water Level - Low Low, Level 2	1,2,3	2 ^(b)	H	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≥ 127.6 inches

(continued)

(a) With any turbine stop valve not closed.

(b) Required to initiate the associated drywell isolation function.

Primary Containment and Drywell Isolation Instrumentation 3.3.6.1

Table 3.3.6.1-1 (page 3 of 6)
Primary Containment and Drywell Isolation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION C.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
2. Primary Containment and Drywell Isolation					
g. Containment and Drywell Purge Exhaust Plenum Radiation - High (continued)	(d)	2	K	SR 3.3.6.1.1	≤ 4.0 mR/hr above background
				SR 3.3.6.1.2	
				SR 3.3.6.1.4	
				SR 3.3.6.1.5	
h. Manual Initiation	1,2,3	2 ^(b)	G	SR 3.3.6.1.5	NA
	(d)	2	K	SR 3.3.6.1.5	NA
3. Reactor Core Isolation Cooling (RCIC) System Isolation					
a. RCIC Steam Line Flow - High	1,2,3	1	F	SR 3.3.6.1.1	≤ 298.5 inches water
				SR 3.3.6.1.2	
				SR 3.3.6.1.3	
				SR 3.3.6.1.4	
				SR 3.3.6.1.5	
b. RCIC Steam Line Flow Time Delay	1,2,3	1	F	SR 3.3.6.1.2	≥ 3 seconds and ≤ 13 seconds
				SR 3.3.6.1.4	
				SR 3.3.6.1.5	
c. RCIC Steam Supply Line Pressure - Low	1,2,3	1	F	SR 3.3.6.1.1	≥ 55 psig
				SR 3.3.6.1.2	
				SR 3.3.6.1.3	
				SR 3.3.6.1.4	
				SR 3.3.6.1.5	
d. RCIC Turbine Exhaust Diaphragm Pressure - High	1,2,3	2	F	SR 3.3.6.1.1	≤ 20 psig
				SR 3.3.6.1.2	
				SR 3.3.6.1.3	
				SR 3.3.6.1.4	
				SR 3.3.6.1.5	
e. RCIC Equipment Area Ambient Temperature - High	1,2,3	1	F	SR 3.3.6.1.1	≤ 145.9°F
				SR 3.3.6.1.4	
				SR 3.3.6.1.5	
				SR 3.3.6.1.7	
f. Main Steam Line Pipe Tunnel Temperature - High	1,2,3	1	F	SR 3.3.6.1.1	≤ 158.9°F
				SR 3.3.6.1.4	
				SR 3.3.6.1.5	
				SR 3.3.6.1.7	

(continued)

(b) Required to initiate the drywell isolation function.

(d) During CORE ALTERATIONS, operations with a potential for draining the reactor vessel, and movement of irradiated fuel assemblies in primary containment.

Primary Containment and Drywell Isolation Instrumentation
3.3.6.1

Table 3.3.6.1-1 (page 4 of 6)
Primary Containment and Drywell Isolation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTM	CONDITIONS REFERENCED FROM REQUIRED ACTION C.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
3. RCIC System Isolation (continued)					
g. Main Steam Line Pipe Tunnel Temperature Timer	1,2,3	1	F	SR 3.3.6.1.4	≤ 30 minutes
				SR 3.3.6.1.5	
				SR 3.3.6.1.7	
h. RHR Equipment Area Ambient Temperature - High	1,2,3	1 per area	F	SR 3.3.6.1.1	≤ 159.9°F
				SR 3.3.6.1.4	
				SR 3.3.6.1.5	
				SR 3.3.6.1.7	
i. RCIC/RHR Steam Line Flow - High	1,2,3	1	F	SR 3.3.6.1.1	≤ 55.6 inches water
				SR 3.3.6.1.2	
				SR 3.3.6.1.3	
				SR 3.3.6.1.4	
				SR 3.3.6.1.5	
j. Drywell Pressure - High	1,2,3	1	F	SR 3.3.6.1.1	≤ 1.88 psig
				SR 3.3.6.1.2	
				SR 3.3.6.1.3	
				SR 3.3.6.1.4	
				SR 3.3.6.1.5	
k. Manual Initiation	1,2,3	1	G	SR 3.3.6.1.5	NA
4. Reactor Water Cleanup (RWCU) System Isolation					
a. Differential Flow - High	1,2,3	1	F	SR 3.3.6.1.1	≤ 77.1 gpm
				SR 3.3.6.1.2	
				SR 3.3.6.1.4	
				SR 3.3.6.1.5	
b. Differential Flow - Timer	1,2,3	1	F	SR 3.3.6.1.2	≤ 10.85 minutes
				SR 3.3.6.1.4	
				SR 3.3.6.1.5	
c. RWCU Heat Exchanger Room Temperature - High	1,2,3	1	F	SR 3.3.6.1.1	≤ 138.9°F
				SR 3.3.6.1.4	
				SR 3.3.6.1.5	
				SR 3.3.6.1.7	
(continued)					

Primary Containment and Drywell Isolation Instrumentation
3.3.6.1

Table 3.3.6.1-1 (page 5 of 6)
Primary Containment and Drywell Isolation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION C.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
4. RWCU System Isolation (continued)					
d. RWCU Pump Rooms Temperature - High	1,2,3	1 per room	F	SR 3.3.6.1.1 SR 3.3.6.1.4 SR 3.3.6.1.5 SR 3.3.6.1.7	≤ 137.9°F
e. RWCU Valve Nest Room Temperature - High	1,2,3	1	F	SR 3.3.6.1.1 SR 3.3.6.1.4 SR 3.3.6.1.5 SR 3.3.6.1.7	≤ 137.9°F
f. RWCU Demineralizer Valve Room Temperature-High	1,2,3	1	F	SR 3.3.6.1.1 SR 3.3.6.1.4 SR 3.3.6.1.5 SR 3.3.6.1.7	≤ 143.7°F
g. RWCU Demin Receiving Tank Room Temperature-High	1,2,3	1	F	SR 3.3.6.1.1 SR 3.3.6.1.4 SR 3.3.6.1.5 SR 3.3.6.1.7	≤ 143.7°F
h. RWCU Demineralizer Room Temperature-High	1,2,3	1 per room	F	SR 3.3.6.1.1 SR 3.3.6.1.4 SR 3.3.6.1.5 SR 3.3.6.1.7	≤ 143.7°F
i. Main Steam Line Pipe Tunnel Temperature - High	1,2,3	1	F	SR 3.3.6.1.1 SR 3.3.6.1.4 SR 3.3.6.1.5 SR 3.3.6.1.7	≤ 158.9°F
j. Reactor Vessel Water Level-Low Low, Level 2	1,2,3	2	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≥ 127.6 inches
k. Standby Liquid Control System Initiation	1,2	1	I	SR 3.3.6.1.5	NA
l. Manual Initiation	1,2,3	2	G	SR 3.3.6.1.5	NA

(continued)

Primary Containment and Drywell Isolation Instrumentation
3.3.6.1

Table 3.3.6.1-1 (page 6 of 6)
Primary Containment and Drywell Isolation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION C.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
5. RHR System Isolation					
a. RHR Equipment Area Ambient Temperature - High	2 ^(e) , 3 ^(e)	1 per area	F	SR 3.3.6.1.1 SR 3.3.6.1.4 SR 3.3.6.1.5 SR 3.3.6.1.7	≤ 159.9°F
b. Reactor Vessel Water Level-Low, Level 3	1, 2 ^(g) , 3 ^(g)	2	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≥ 177.1 inches
	2 ^(e) , 3 ^(e) , 4, 5	2 ^(f)	J	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≥ 177.1 inches
c. Reactor Vessel Steam Dome Pressure - High	1, 2, 3	2	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 150 psig
d. Drywell Pressure - High	1, 2, 3	2	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 1.88 psig
e. Manual Initiation	1, 2, 3	2	G	SR 3.3.6.1.5	NA

(e) With reactor vessel steam dome pressure less than the RHR cut in permissive pressure.

(f) Only one trip system required in MODES 4 and 5 with RHR Shutdown Cooling System integrity maintained.

(g) With reactor steam dome pressure greater than or equal to the RHR cut in permissive.

BASES

SURVEILLANCE
REQUIREMENTS
(continued)

SR 3.3.6.1.1

Performance of the CHANNEL CHECK once every 12 hours ensures that a gross failure of instrumentation has not occurred. A CHANNEL CHECK is normally a comparison of the parameter indicated on one channel to a similar parameter on other channels. It is based on the assumption that instrument channels monitoring the same parameter should read approximately the same value. Significant deviations between the instrument channels could be an indication of excessive instrument drift in one of the channels or something even more serious. A CHANNEL CHECK will detect gross channel failure; thus, it is key to verifying the instrumentation continues to operate properly between each CHANNEL CALIBRATION.

Agreement criteria are determined by the plant staff, based on a combination of the channel instrument uncertainties, including indication and readability. If a channel is outside the criteria, it may be an indication that the instrument has drifted outside its limit. The Frequency is based on operating experience that demonstrates channel failure is rare.

The CHANNEL CHECK supplements less formal, but more frequent, checks of channels during normal operational use of the displays associated with the channels required by the LCO.

SR 3.3.6.1.2

A CHANNEL FUNCTIONAL TEST is performed on each required channel to ensure that the entire channel will perform the intended function.

Any setpoint adjustment shall be consistent with the assumptions of the current plant specific setpoint methodology.

The quarterly Frequency is based on reliability analysis described in References 5 and 6.

For Function 1.e, "Main Steam Line Pipe Tunnel Temperature - High", this SR is applicable only to the Division 3 and 4 ambient temperature channels. Divisions 1 and 2 are monitored by digital instrument channels, which are functionally tested on a semiannual basis by SR 3.3.6.1.7.

(continued)

BASES

SURVEILLANCE
REQUIREMENTS
(continued)

SR 3.3.6.1.6

This SR ensures that the individual channel response times are less than or equal to the maximum values assumed in the accident analysis. Testing is performed only on channels where the assumed response time does not correspond to the diesel generator (DG) start time. For channels assumed to respond within the DG start time, sufficient margin exists in the 10 second start time when compared to the typical channel response time (milliseconds) so as to assure adequate response without a specific measurement test. The instrument response times must be added to the PCIV closure times to obtain the ISOLATION SYSTEM RESPONSE TIME. ISOLATION SYSTEM RESPONSE TIME acceptance criteria are included in References 7 and 8. ISOLATION SYSTEM RESPONSE TIME tests are conducted on an 18 month STAGGERED TEST BASIS. This test Frequency is consistent with the typical industry refueling cycle and is based upon plant operating experience that shows that random failures of instrumentation components causing serious response time degradation, but not channel failure, are infrequent.

SR 3.3.6.1.7

A CHANNEL FUNCTIONAL TEST is performed on each required channel to ensure that the entire channel will perform the intended function.

Any setpoint adjustment shall be consistent with the assumptions of the current plant specific setpoint methodology.

The semiannual Frequency is based on the reduced drift and the design features inherent in digital systems (Ref. 9).

For Function 1.e, "Main Steam Line Pipe Tunnel Temperature - High", this SR is applicable only to the Division 1 and 2 ambient temperature channels. Divisions 3 and 4 are monitored by analog instrument channels, which are functionally tested on a quarterly basis by SR 3.3.6.1.2.

(continued)

BASES

REFERENCES

1. USAR, Section 6.3.
 2. USAR, Chapter 15.
 3. NEDO-31466, "Technical Specification Screening Criteria Application and Risk Assessment," November 1987.
 4. USAR, Section 9.3.5.
 5. NEDC-31677-P-A, "Technical Specification Improvement Analysis for BWR Isolation Actuation Instrumentation," June 1989.
 6. NEDC-30851-P-A, Supplement 2, "Technical Specifications Improvement Analysis for BWR Isolation Instrumentation Common to RPS and ECCS Instrumentation," March 1989.
 7. USAR, Section 15.1.3.
 8. USAR, Section 15.6.
 9. Letter PY-CEI/NRR-1654L, "License Amendment Request: Replacement of Selected Analog Leak Detection System Instruments with GE NUMAC Leak Detection Monitors," November 22, 1993.
-