

# LIMITING CONDITIONS FOR OPERATION

# SURVEILLANCE REQUIREMENTS

3.2 (cont'd.)

## D. Radiation Monitoring Systems - Isolation & Initiation Functions

### 1. Steam Jet Air Ejector Off-Gas System

a. Operability of the Steam Jet Air Ejector Off-Gas System monitor is defined in Table 3.21.A.2.

b. The time delay setting for closure of the steam jet air ejector isolation valves shall not exceed 15 minutes.

c. Other limiting conditions for operation are given on Table 3.2.D and Specifications 3.21.A.2 and 3.21.C.6.

### 2. Reactor Building Isolation and Standby Gas Treatment Initiation

The limiting conditions for operation are given on Table 3.2.D.

### 3. Liquid Radwaste Discharge Isolation

The limiting conditions for operation are given on Table 3.2.D and Specification 3.21.B.

### 4. Main Control Room Ventilation Isolation

The limiting conditions for operation are given on Table 3.2.D and the Section entitled "Additional Safety Related Plant Capabilities."

### 5. Mechanical Vacuum Pump Isolation

a. The mechanical vacuum pump shall be capable of being automatically isolated and secured by a signal of high radiation in the main steam line tunnel whenever the main steam isolation valves are open.

b. If the limits of (3.2.D.5.a) are not met, the vacuum pump shall be isolated.

4.2 (cont'd.)

## D. Radiation Monitoring Systems - Isolation & Initiation Functions

### 1. Steam Jet Air Ejector Off-Gas System

Instrumentation surveillance requirements are given on Table 4.2.D.

### 2. Reactor Building Isolation and Standby Gas Treatment Initiation

Instrumentation surveillance requirements are given on Table 4.2.D.

### 3. Liquid Radwaste Discharge Isolation

Instrumentation surveillance requirements are given on Table 4.2.D.

### 4. Main Control Room Ventilation Isolation

The instrument surveillance requirements are given on Table 4.2.D.

### 5. Mechanical Vacuum Pump Isolation

The instrument surveillance requirements are given on Tables 4.1.1, 4.1.2, and 4.2.D.

COOPER NUCLEAR STATION  
TABLE 3.2.B (Page 6)  
REACTOR CORE ISOLATION COOLING SYSTEM (RCIC) CIRCUITRY REQUIREMENTS

Instrument	Instrument I.D. No.	Setting Limit	Minimum Number of Operable Components Per Trip System (1)	Action Required When Component Operability Is Not Assured
RCIC High Turbine Exhaust Press.	RCIC-PS-72, A & B	$\leq 25$ psig	1(2)	A
RCIC Low Pump Suction Press.	RCIC-PS-67-1	$\leq 15$ " Hg Vacuum	1(2)	
RCIC Steam Line Space Excess Temp.	RCIC-TS-79, A,B,C,&D RCIC-TS-80, A,B,C,&D RCIC-TS-81, A,B,C,&D RCIC-TS-82, A,B,C,&D	$\leq 200^{\circ}\text{F}$	2(4)	A
RCIC Steam Line High AP	RCIC-dPIS-83 & 84	$370" \leq S \leq 620" \text{ H}_2\text{O}$ $-370" \geq S \geq -620" \text{ H}_2\text{O}$	1	A
RCIC Steam Supply Press. Low	RCIC-PS-87, A,B,C,&D	$\geq 50$ psig	2(2)	A
RCIC Low Pump Disch. Flow	RCIC-FIS-57	$\geq 40$ gpm	1(2)	A
Pump Discharge Line Low Pressure	CM-PS-269	$\geq 10$ psig	(3)	D
RCIC Turbine Condition- al Supervisory Alarm Timer	RCIC-TDR-K9	$13.5 \leq T \leq 16.5$ sec	(3)	E
Reactor Low Water Level	10A-K80, A & B 10A-K79, A & B (NBI-LIS-72, A,B,C, & D)	$\geq -37"$ Indicated Level	2(2)	A
Reactor High Water Level	NBI-LIS-101, A & C #2	$\leq +58.5"$ Indicated Level	2(2)	A
RCIC Steamline High AP Actuation Timer	RCIC-TDR-K12 RCIC-TDR-K32	$2.7 \leq T \leq 3.3$ sec	1	A

COOPER NUCLEAR STATION  
TABLE 3.2.D  
RADIATION MONITORING SYSTEMS THAT INITIATE AND/OR ISOLATE SYSTEMS

System	Instrument I. D. No.	Setting Limit	Number of Sensor Channels Provided by Design	Action (1)
Steam Jet Air Ejector Off-Gas System	RMP-RM-150 A & B	(3)	2	A
Reactor Building Isolation and Standby Gas Treatment Initiation	RMP-RM-452 A, B, C & D	< 100 mr/hr	4	B
Liquid Radwaste Discharge Isolation	RMP-RM-1	(2)	1	C
Main Control Room Ventilation Isolation	(RMV-RM-1)	$4 \times 10^3$ CPM	1	D
Mechanical Vacuum Pump Isolation (4)	RMP-RM-251 A, B, C & D	3 times normal full power background. Alarm at 1.5 times normal full power background	4	E

NOTES FOR TABLE 3.2.D

1. Action required when component operability is not assured.
  - A. (1) If radiation level exceeds 1.0 ci/sec (prior to 30 min. delay line) for a period greater than 15 consecutive minutes, the off-gas isolation valve shall close and reactor shutdown shall be initiated immediately and the reactor placed in a cold shutdown condition within 24 hours.
  - A. (2) Refer to Specification 3.21.A.2.
  - B. A minimum of one instrument channel per trip system shall be operable when handling irradiated fuel inside secondary containment, and when moving loads inside secondary containment which have the potential to damage irradiated fuel. If this requirement cannot be met by a trip system, then that trip system shall be tripped. If this requirement cannot be met by both trip systems, then the following actions shall be taken:
    - (1) Cease handling of irradiated fuel inside secondary containment and remove the load from over the irradiated fuel via the most direct path, or
    - (2) Isolate secondary containment and start SBGT.
  - C. During release of radioactive wastes, the effluent control monitor shall be set to alarm and automatically close the waste discharge valve prior to exceeding the limits of Specification 3.21.B.1.
  - D. Refer to Section entitled "Additional Safety Related Plant Capabilities".
  - E. Refer to Section 3.2.d.5 and the requirements for Primary Containment Isolation on high main steam line radiation. Table 3.2.A.
2. Trip settings to correspond to Specification 3.21.B.1.
3. Trip settings to correspond to Specification 3.21.C.6.a.
4. Minimum number of channels operable shall be one during mechanical vacuum pump operation.

COOPER NUCLEAR STATION  
TABLE 4.2.A (Page 1)  
PRIMARY CONTAINMENT AND REACTOR VESSEL ISOLATION SYSTEM  
TEST AND CALIBRATION FREQUENCIES

Item	Item I.D. No.	Function Test Freq.	Calibration Freq.	Instrument Check
<u>Instrument Channels</u>				
Reactor Low Water Level	NBI-LIS-101, A,B,C,&D	Once/Month (1)	Once/3 Months	Once/Day
Reactor Low Low Water Level	NBI-LIS-57, A & B #2 NBI-LIS-58, A & B #2	Once/Month (1)	Once/3 Months	Once/Day
Reactor Low Low Low Water Level	NBI-LIS-57, A & B #1 NBI-LIS-58, A & B #1	Once/Month (1)	Once/3 Months	Once/Day
Main Steam Line Leak Detection	MS-TS-121, A,B,C,&D 122, 123, 124, 143, 144, 145, 146, 147, 148, 149, 150	Once/Month (1)	Once/Operating Cycle	None
Main Steam Line High Flow	MS-dPIS-116, A,B,C,&D 117 118 119	Once/Month (1) Once/Month (1) Once/Month (1) Once/Month (1)	Once/3 Months Once/3 Months Once/3 Months Once/3 Months	None None None None
Main Steam Line Low Press.	MS-PS-134, A,B,C,&D	Once/Month (1)	Once/3 Months	None
High Reactor Pressure	RR-PS-128, A & B	Once/Month (1)	Once/3 Months	None
Condenser Low Vacuum	MS-PS-103, A,B,C,&D	Once/Month (1)	Once/3 Months	None
Reactor Water C.U. High Flow	RWCU-dPIS-170, A & B	Once/Month (1)	Once/3 Months	None
Reactor Water C.U. High Space Temp.	RWCU-TS-150 A-D, 151, 152, 153, 154, 155, 156, 157, 158, 159, RWCU-TS-81, A,B,E,F RWCU-TS-81 C,D,G,H	Once/Month (1)	Once/Operating Cycle	None

COOPER NUCLEAR STATION  
TABLE 4.2.B (Page 2)  
RHR SYSTEM TEST & CALIBRATION FREQUENCIES

Item	Item I.D. No.	Functional Test Freq.	Calibration Freq.	Instrument Check
<u>Instrumentation</u>				
1. Drywell High Pressure	PC-PS-101, A, B, C & D	Once/Month (1)	Once/3 Months	None
2. Reactor Low Water Level	NBI-LIS-72, A, B, C & D #1	Once/Month (1)	Once/3 Months	Once/Day
3. Reactor Vessel Shroud Level	NBI-LITS-73, A & B #1	Once/Month (1)	Once/3 Months	Once/Day
4. Reactor Low Pressure	RR-PS-128 A & B	Once/Month (1)	Once/3 Months	None
5. Reactor Low Pressure	NBI-PS-52 A1, A2, C1, & C2 NBI-PIS-52 B & D	Once/Month (1)	Once/3 Months	None
6. Drywell Press.-Containment Spray	PC-PS-119, A, B, C & D	Once/Month (1)	Once/3 Months	None
7. RHR Pump Discharge Press.	RHR-PS-120, A, B, C & D	Once/Month (1)	Once/3 Months	None
8. RHR Pump Discharge Press.	RHR-PS-105, A, B, C & D	Once/Month (1)	Once/3 Months	None
9. RHR Pump Low Flow Switch	RHR-dPIS-125 A & B	Once/Month (1)	Once 3 Months	None
10. RHR Pump Start Time Delay	RHR-TDR-K70, A & B	Once/Month (1)	Once/Oper. Cycle	None
11. RHR Injection Valve Close T.D.	RHR-TDR-K45 1A & 1B	Once/Month (1)	Once/Oper. Cycle	None
12. RHR Pump Start Time Delay	RHR-TDR-K75, A & B	Once/Month (1)	Once/Oper. Cycle	None
13. RHR Heat Exchanger Bypass T.D.	RHR-TDR-K93, A & B	Once/Month (1)	Once/Oper. Cycle	None
14. RHR Cross Tie Valve Position	RHR-LMS-8	Once/Month (1)	N.A.	
15. Low Voltage Relays	27 X 3/1A	(7)		None
16. Low Voltage Relays	27 X 3/1B	(7)		None
17. Low Voltage Relays	27 x 2/1F, 27 x 2/1G	(7)		None
18. Low Voltage Relays	27 X 1/1F, 27 X 1/1G	(7)		None
19. Pump Disch. Line Press. Low	CM-PS-266, CM-PS-270	Once/3 Months	Once/3 Months	None
20. Emergency buses Undervoltage Relays (Degraded Voltage)	27/1F-2, 27/1FA 2, 27/1G-2, 27/1GB-2	Once/Month	Once/18 Months	Once/12 hrs.
21. Emergency buses Loss of Voltage Relays	27/1F-1, 27/1FA, 27/1G-1, 27/1GB-1, 27/ET-1, 27/ET-2	Once/Month	Once/18 Months	Once/12 hrs.
22. Emergency Buses Undervoltage Relays Timers	27X7/1F, 27X7/1G	Once/Month	Once/18 Months	None

# COOPER NUCLEAR TATION

TABLE 4.2.D

MINIMUM TEST AND CALIBRATION FREQUENCIES FOR RADIATION MONITORING SYSTEMS

System	Instrument I.D. No.	Functional Test Freq.	Calibration Freq.	Instrument Check
<u>Instrument Channels</u>				
Steam Jet Air Ejector Off-Gas System	RMP-RM-150 A & B	(12)	(12)	(12)
Reactor Building Isolation and Standby Gas Treatment Initiation	RMP-RM-452 A, B, C & D	(12)	(12)	(12)
Liquid Radwaste Discharge Isolation	RMP-RM-1	(11)	(11)	(11)
Main Control Room Ventilation Isolation	RMV-RM-1	Once/Month (1)	Once/3 Months	Once/Day
Mechanical Vacuum Pump Isolation	RMP-RM-251, A, B, C & D		See Tables 4.1.1 & 4.1.2	
<u>Logic Systems</u>				
SJAE Off-Gas Isolation		Once/18 Months		
Standby Gas Treatment Initiation		Once/18 Months		
Reactor Building Isolation		Once/18 Months		
Liquid Radwaste Disch. Isolation		Once/6 Months		
Main Control Room Vent Isolation		Once/6 Months		
Mechanical Vacuum Pump Isolation		Once/Operating Cycle		



### 3.2 BASES (Cont'd)

Both instruments are required for trip but the instruments are so designed that any instrument failure gives a downscale trip. The trip setting of 1.0 ci/sec (prior to 30 min. delay) provides an improved capability to detect fuel pin cladding failures to allow prevention of serious degradation of fuel pin cladding integrity which might result from plant operation with a misoriented or misloaded fuel assembly. This limit is more restrictive than 0.39 ci/sec noble gas release rate at the air ejectors (after 30 min. delay) which was used as the source term for an accident analysis of the augmented off-gas system. Using the .39 ci/sec source term, the maximum off-site total body dose would be less than the .5 rem limit.

#### 2. Reactor Building Isolation and Standby Gas Treatment Initiation

Reactor Building Isolation and Standby Gas Treatment initiation is provided in a 1-out-of-2 taken twice logic design via four radiation sensors located on the Reactor Building ventilation exhaust plenum. Each trip system (division) consists of two channels with a 1-out-of-2 logic for upscale trips, and a 2-out-of-2 logic for downscale trips. This trip function is provided to limit the release of radioactivity resulting from a refueling (fuel handling) accident.

Trip settings of <100 mr/hr for the monitors in the ventilation exhaust ducts are based upon initiating normal ventilation isolation and standby gas treatment system operation so that none of the activity released during the refueling accident leaves the Reactor Building via the normal ventilation path but rather all the activity is processed by the standby gas treatment system.

#### 3. Liquid Radwaste Discharge Isolation

The liquid radwaste monitor assures that all liquid discharged to the discharge canal does not exceed the limits of Specification 3.21.B. Upon sensing a high discharge level, an isolation signal is generated which closes the radwaste discharge valve. The set point is adjustable to compensate for variable isotopic discharges and dilution flow rates.

#### 4. Main Control Room Ventilation

The main control room ventilation isolation is provided by a detector monitoring the intake of the control room ventilation system. Automatic isolation of the normal supply and exhaust and the activation of the emergency filter system is provided by the radiation detector trip function at the predetermined trip level.

#### 5. Mechanical Vacuum Pump

The mechanical vacuum pump isolation prevents the exhausting of radioactive gas thru the 1 minute holdup line upon receipt of a main steam line high radiation signal.

#### E. Drywell Leak Detection

Flow transmitters are used to record the flow of liquid from the drywell sumps. An air sampling system is also provided to detect leakage inside the primary containment.



## LIMITING CONDITIONS FOR OPERATION

### 3.7.C (cont'd.)

- a. The reactor is subcritical and Specification 3.3.A is met.
- b. The reactor water temperature is below 212°F and the reactor coolant system is vented.
- c. No activity is being performed which can reduce the shutdown margin below that specified in Specification 3.3.A.
- d. No irradiated fuel is being handled in the secondary containment and no loads which could potentially damage irradiated fuel are being moved in the secondary containment.
- e. If secondary containment integrity cannot be maintained, restore secondary containment integrity within 4 hours or:
  - a. Be in at least Hot Shutdown within the next 12 hours and in cold shutdown within the following 24 hours.
  - b. Suspend irradiated fuel handling operations in the secondary containment, movement of loads which could potentially damage irradiated fuel in the secondary containment, and all core alterations which could reduce the shutdown margin. The provisions of Specification 1.0.J are not applicable.

### D. Primary Containment Isolation Valves

1. During reactor power operating conditions, all isolation valves listed in Table 3.7.1 and all instrument line flow check valves shall be operable except as specified in 3.7.D.2.

## SURVEILLANCE REQUIREMENTS

### 4.7.C (cont'd.)

- a. A preoperational secondary containment capability test shall be conducted after isolating the reactor building and placing either standby gas treatment system filter train in operation. Such tests shall demonstrate the capability to maintain 1/4 inch of water vacuum under calm wind ( $2 < \bar{u} < 5$  m p h) conditions with a filter train flow rate of not more than 100% of building volume per day. ( $\bar{u}$  = wind speed)
- b. Additional tests shall be performed during the first operating cycle under an adequate number of different environmental wind conditions to enable valid extrapolation of the test results.
- c. Secondary containment capability to maintain 1/4 inch of water vacuum under calm wind ( $2 < \bar{u} < 5$  m p h) conditions with a filter train flow rate of not more than 100% of building volume per day, shall be demonstrated at each refueling outage prior to refueling.
- d. After a secondary containment violation is determined, the standby gas treatment system will be operated immediately after the affected zones are isolated from the remainder of the secondary containment to confirm its ability to maintain the remainder of the secondary containment at 1/4 inch of water negative pressure under calm wind conditions.

### D. Primary Containment Isolation Valves

1. The primary containment isolation valves surveillance shall be performed as follows:
  - a. At least once per operating cycle the operable isolation valves that are power operated and automatically initiated shall be tested for simulated automatic initiation and closure times.

### 3.7.A & 4.7.A BASES(cont'd)

The primary containment is normally slightly pressurized during periods of reactor operation. Nitrogen used for inerting could leak out of the containment but air could not leak in to increase oxygen concentration. Once the containment is filled with nitrogen to the required concentration, no monitoring of oxygen concentration is necessary. However, at least twice a week the oxygen concentration will be determined as added assurance.

The 500 gallon conservative limit on the nitrogen storage tank assures that adequate time is available to get the tank refilled assuming normal plant operation. The estimated maximum makeup rate is 1500 SCFD which would require about 160 gallons for a 10 day makeup requirement. The normal leak rate should be about 200 SCFD.

### 3.7.A.6 & 4.7.A.6 LOW-LOW SET RELIEF FUNCTION

The low-low set relief logic is an automatic safety relief valve (SRV) control system designed to mitigate the postulated thrust load concern of subsequent actuations of SRV's during certain transients (such as inadvertent MSIV closure) and small and intermediate break loss-of-coolant accident (LOCA) events. The setpoints used in Section 3.7.A.6.6 are based upon a minimum blowdown range to provide adequate time between valve actuations to allow the SRV discharge line high water leg to clear, coupled with consideration of instrument inaccuracy and the main steam isolation valve isolation setpoint.

The as-found setpoint for NBI-PS-51A, the pressure switch controlling the opening of RV-71D, must be  $\leq 1040$  psig. The as-found closing setpoint for NBI-PS-51B must be at least 90 psig less than 51A, and must be  $\geq 850$  psig. The as-found setpoint for NBI-PS-51C, pressure switch controlling the opening of RV-71F must be  $\leq 1050$  psig. The as-found closing setpoint for NBI-PS-51D must be at least 90 psig below 51C, and must be  $\geq 850$  psig. This ensures that the analytical upper limit for the opening setpoint (1050 psig), the analytical lower limit on the closing setpoint (850 psig) and the analytical limit on the blowdown range ( $\geq 90$  psig) for the Low-Low Set Relief Function are not exceeded. Although the specified instrument setpoint tolerance is  $\pm 20$  psig, an instrument drift of  $\pm 25$  psig was used in the analysis to ensure adequate margin in determining the valve opening and closing setpoints. The opening setpoint is set such that, if both the lowest set non-LLS S/RV and the highest set of the two LLS S/RVs drift 25 psig in the worst case directions, the LLS S/RVs will still control subsequent S/RV actuations. Likewise, the closing setpoint is set to ensure the LLS S/RV closing setpoint remains above the MSIV low pressure trip. The 90 psig blowdown provides adequate energy release from the vessel to ensure time for the water leg to clear between subsequent S/RV actuations.

### 3.7.B & 3.7.C STANDBY GAS TREATMENT SYSTEM AND SECONDARY CONTAINMENT

The secondary containment is designed to minimize any ground level release of radioactive materials which might result from a serious accident. The reactor building provides secondary containment during reactor operation when the drywell is sealed and in service. The reactor building provides primary containment when the reactor is shut down and the drywell is open, as during refueling. Because the secondary containment is an integral part of the complete containment system, secondary containment is required at all times that primary containment is required as well as during refueling, and during movement of loads which could potentially damage irradiated fuel in the secondary containment. Secondary containment may be broken for short periods of time to allow access to the reactor building roof to perform necessary inspections and maintenance.

The standby gas treatment system is designed to filter and exhaust the reactor building atmosphere to the stack during secondary containment isolation conditions. Both standby gas treatment system fans are designed to automatically start upon containment isolation and to maintain the reactor building pressure to the design negative pressure so that all leakage should be in-leakage. Should one system fail to start, the redundant system is designed to start automatically. Each of the two fans has 100 percent capacity.

## LIMITING CONDITIONS FOR OPERATION

### 3.10.B (Cont'd)

4. During spiral reload, SRM operability will be verified by using a portable external source every 12 hours until the required amount of fuel is loaded to maintain 3 cps. As an alternative to the above, two fuel assemblies will be loaded in different cells containing control blades around each SRM to obtain the required 3 cps. Until these two assemblies have been loaded, the 3 cps requirement is not necessary.

#### C. Spent Fuel Pool Water Level

Whenever irradiated fuel is stored in the spent fuel pool, the pool water level shall be maintained at or above 84' above the top of the fuel.

#### D. Time Limitation

Irradiated fuel shall not be handled in or above the reactor prior to 24 hours after reactor shutdown.

#### E. Standby Gas Treatment System

From and after the date that one standby gas treatment system is made or found to be inoperable for any reason, handling of irradiated fuel, and movement of loads which could potentially damage irradiated fuel in the secondary containment is permissible only during the succeeding seven days unless such system is sooner made operable, provided that during such seven days all active components of the other standby gas treatment system, and its associated diesel generator, shall be operable.

At least one diesel generator shall be operable during fuel handling operations. This one diesel shall be capable of supplying power to an operable Standby Gas Treatment System.

#### F. Core Standby Cooling Systems

During a refueling outage, refueling operation may continue with one core spray system or the LPCI mode of RHR inoperable for a period of 30 days. Refueling is permitted with the suppression chamber drained provided an operable core spray system or subsystem of the LPCI mode of RHR is aligned to take a suction on the condensate storage tank containing at least 150,000 gallons ( $\geq 14$  ft. indicated level).

## SURVEILLANCE REQUIREMENTS

### 4.10 (Cont'd)

#### C. Spent Fuel Pool Water Level

When irradiated fuel is stored in the spent fuel pool, the water level shall be recorded daily.

#### E. Standby Gas Treatment System

When one standby gas treatment system becomes inoperable, the other standby gas treatment system shall be demonstrated to be operable immediately and daily thereafter. A demonstration of diesel generator operability is not required by this specification.

TABLE 4.21.A.2  
RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	SOURCE CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST
1. Steam Jet Air Ejector				
a. Noble Gas Activity Monitor	D***	M	R(3)	Q(2) R(1)
b. Effluent System Flow Rate Measuring Device	D*	NA	R	Q
2. Augmented Offgas Treatment System Explosive Gas Monitoring System				
a. Hydrogen Monitor (2% monitor)	D**	NA	Q(4)	M
3. Reactor Building Ventilation Monitoring System				
a. Noble Gas Activity Monitor (KAMAN)	D*	M	R(3)	Q(5)
b. Iodine Sampler Cartridge	W*	NA	NA	NA
c. Particulate Sampler Filter	W*	NA	NA	NA
d. Effluent System Flow Rate Measuring Device	D*	NA	R	Q
e. Sampler Flow Rate Measuring Device	D*	NA	R	Q
f. Isolation Monitor (GE) (6)	D*	Q	R(3)	R(1)
4. (****)				
a. Noble Gas Activity Monitor (KAMAN)	D*	M	R(3)	Q(5)
b. Iodine Sampler	W*	NA	NA	NA
c. Particulate Sampler	W*	NA	NA	NA
d. Effluent System Flow Rate Measuring Device	D*	NA	R	Q
e. Sampler Flow Rate Monitor	D*	NA	R	Q

NOTES FOR TABLE 4.21.A.2

- \* During releases via this pathway.
- \*\* During augmented offgas treatment system operation.
- \*\*\* During operation of the Steam Jet Air Ejector.
- \*\*\*\* Elevated Release Point (ERP) Monitoring System, Radwaste Ventilation Monitoring System, and Turbine Building Ventilation Monitoring System

- (1) The CHANNEL FUNCTIONAL TEST shall also demonstrate that automatic isolation of this pathway and control room alarm annunciation occurs if any of the following conditions exists:
  1. Instrument indicates measured levels above the alarm/trip setpoint.
  2. Circuit failure.
  3. Instrument indicates a downscale failure.
  4. Instrument controls not set in operate mode.
- (2) The CHANNEL FUNCTIONAL TEST shall also demonstrate that control room alarm annunciation occurs if any of the following conditions exists:
  1. Instrument indicates measured levels above the alarm/trip setpoint.
  2. Circuit failure.
  3. Instrument indicates a downscale failure.
  4. Instrument controls not set in operate mode.
- (3) The CHANNEL CALIBRATION shall be established in accordance with established station calibration procedures.
- (4) The CHANNEL CALIBRATION shall include the use of a standard gas sample containing a percentage of hydrogen to verify accuracy of the monitoring channel in its operating range.
- (5) Same as (2) except Parts 3 and 4 are deleted.
- (6) Refer to Section 3.2.D.2 for the limiting conditions for operation.

FREQUENCY NOTATION:

S	=	At least once per 12 hours.
D	=	At least once per 24 hours.
W	=	At least once per 7 days.
M	=	At least once per 31 days.
Q	=	At least once per 92 days.
SA	=	At least once per 184 days.
A	=	At least once per year.
R	=	At least once per 18 months.
S/U	=	Prior to each reactor startup.
P	=	Completed prior to each release.
NA	=	Not applicable.