Note that all TRM pages for a TRM Section are shown with same revision when any change to that Section is made. Revision Bars show the specific change locations.

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- NOTE -

Refer to Updated FSAR Section 16.3 for discussion of the FSAR Scope.

TABLE OF CONTENTS FSAR SCOPE

TRM 1.0 USE AND APPLICATION

TRM 1.1 Definitions

- NOTE -

1. Technical Requirements (TR) Definitions follow those terms defined in Technical Specifications (TS) Section 1.1. Only definitions specific to the TRM will be defined in this section.

2. The defined terms appear in capitalized type and are applicable throughout the TRM.

3. When a term is defined in both the TS and the TRM, the TRM definition takes precedence within the TRM.

4. When a term defined in TS Section 1.1 refers to “OPERABLE” or “OPERABILITY” its use within the TRM is understood to apply the TRM requirement-specific defined terms (i.e., FUNCTIONAL or FUNCTIONALITY) as required in each Technical Requirement.

Term	Definition
ACTIONS	ACTIONS shall be that part of a Technical Requirement that prescribes Required Actions to be taken under designated Conditions within specified Completion Times.
FUNCTIONAL - FUNCTIONALITY	A system, subsystem, train, component, or device shall be FUNCTIONAL or have FUNCTIONALITY when it is capable of performing its specified function(s), as set forth in the current licensing basis and when all necessary attendant instrumentation, controls, normal or emergency electrical power, cooling and seal water, lubrication, and other auxiliary equipment that are required for the system, subsystem, train, component, or device to perform its specified function(s) are also capable of performing their related support function(s).

TRM 1.0 USE AND APPLICATION

TRM 1.2 Logical Connectors

Logical Connectors are discussed in Technical Specification Section 1.2 and are applicable throughout the Technical Requirements Manual (TRM). When TS Section 1.2 refers to "OPERABLE" or "OPERABILITY" its use as applied to the TRM is understood to apply the TRM requirement-specific defined terms (i.e., FUNCTIONAL or FUNCTIONALITY) as required in each Technical Requirement.

TRM 1.0 USE AND APPLICATION

TRM 1.3 Completion Times

Completion Times are discussed in Technical Specification Section 1.3 and are applicable throughout the Technical Requirements Manual (TRM). When TS Section 1.3 refers to "OPERABLE" or "OPERABILITY" its use as applied to the TRM is understood to apply the TRM requirement-specific defined terms (i.e., FUNCTIONAL or FUNCTIONALITY) as required in each Technical Requirement. Similarly, when TS Section 1.3 refers to an "LCO" its use as applied to the TRM is understood to apply to Technical Requirements (TRs).

TRM 1.0 USE AND APPLICATION

TRM 1.4 Frequency

Frequency is discussed in Technical Specification Section 1.4 and is applicable throughout the Technical Requirements Manual (TRM). When TS Section 1.4 refers to “OPERABLE” or “OPERABILITY” its use as applied to the TRM is understood to apply the TRM requirement-specific defined terms (i.e., FUNCTIONAL or FUNCTIONALITY) as required in each Technical Requirement. Similarly, when TS Section 1.4 refers to an “LCO” its use as applied to the TRM is understood to apply to Technical Requirements (TRs). TS Section 1.4 references to LCO 3.0.4 and SR 3.0.4 are not applicable to the TRM.

TRM 3.0 TECHNICAL REQUIREMENT (TR) APPLICABILITY

TR 3.0.1 Each TR shall be met during the MODES or other specified conditions in the Applicability, except as provided in TR 3.0.2.

TR 3.0.2 Upon discovery of a failure to meet a TR, the Required Actions of the associated Conditions shall be met.

If the TR is met or is no longer applicable prior to expiration of the specified Completion Time(s), completion of the Required Action(s) is not required, unless otherwise stated.

TR 3.0.3 When a TR is not met and the associated ACTIONS are not met, an associated ACTION is not provided, or if directed by the associated ACTIONS:

a. Initiate action to restore compliance with the TR or associated ACTIONS immediately;

b. Initiate action to assess and manage the risk of the resulting unit configuration immediately, and

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- NOTE -

TR 3.0.3.c shall be completed if TR 3.0.3 is entered.

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c. Enter the circumstances of entry into TR 3.0.3 into the Corrective Action Program within 24 hours.

TRM 3.0 TECHNICAL REQUIREMENT SURVEILLANCE (TRS) APPLICABILITY

TRS 3.0.1 TRSs shall be met during the MODES or other specified conditions in the Applicability for the individual TR, unless otherwise stated in the TRS. Failure to meet a TRS, whether such failure is experienced during the performance of the TRS or between performances of the TRS, shall be failure to meet the TR. Failure to perform a TRS within the specified Frequency shall be failure to meet the TR. TRSs do not have to be performed on nonfunctional equipment or variables outside specified limits.

TRS 3.0.2 The specified Frequency for each TRS is met if the TRS is performed within 1.25 times the interval specified in the Frequency, as measured from the previous performance or as measured from the time a specified condition of the Frequency is met.

For Frequencies specified as “once,” the above interval extension does not apply.

If a Completion Time requires periodic performance on a “once per . . .” basis, the above Frequency extension applies to each performance after the initial performance.

Exceptions to this TRS are stated in the individual TRSs.

TRS 3.0.3 If it is discovered that a TRS was not performed within its specified Frequency, then compliance with the requirement to declare theTR not met may be delayed, from the time of discovery, up to 24 hours or up to the limit of the specified Frequency, which ever is greater. This delay period is permitted to allow performance of the TRS. A risk evaluation shall be performed for any TRS delayed greater than 24 hours and the risk impact shall be managed.

If the TRS is not performed within the delay period, the TR must immediately be declared not met, and the applicable Condition(s) must be entered.

When the TRS is performed within the delay period, and the TRS is not met, the TR must immediately be declared not met, and the applicable Condition(s) must be entered.

TRM 3.2 POWER DISTRIBUTION LIMITS

TRM 3.2.1 On-Line Power Distribution Monitoring System (OPDMS) – Input Parameters

TR 3.2.1 OPDMS Input Parameters listed in Table TR 3.2.1-1 shall be FUNCTIONAL.

APPLICABILITY: MODE 1
MODE 2 with keff ≥ 1.0

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more required input parameters not FUNCTIONAL.	A.1 Restore required parameter(s) to FUNCTIONAL status.	7 days

TECHNICAL REQUIREMENT SURVEILLANCE

SURVEILLANCE		FREQUENCY
TRS 3.2.1.1	Perform CHANNEL CHECK on each required channel.	7 days

Table TR 3.2.1-1 (page 1 of 1)
OPDMS Input Parameters

PARAMETER	MINIMUM DATA REQUIRED
1. Individual Control Rod Position	Digital Indicated Rod Position (DRPI) signal for each control rod
2. Control Rod OPERABILITY Status	Indication of OPERABILITY status of each control rod
3. Source of Control Rod Position Data	Indication of source of control rod position data for each rod
4. Inoperable / misaligned Control Rod Position	Indication of position of inoperable / misaligned control rods

TRM 3.2.1 On-Line Power Distribution Monitoring System (OPDMS)-Input Parameters

Bases

The core monitoring system is the component of the OPDMS that calculates from present plant data the core power distribution and reactivity and determines margin to core thermal limits and required SHUTDOWN MARGIN. The core monitoring system is the Westinghouse BEACON™ Core Monitoring System. The technology utilized is licensed by the NRC for direct monitoring of core parameters to limits. The core monitoring system requires present plant data of reactor THERMAL POWER, control rod position and inlet temperature to provide monitoring of SHUTDOWN MARGIN (SDM) in MODES 1 and 2 with $k_{eff} \geq 1.0$ per TS 3.2.5. Valid data from the Incore Instrumentation System neutron detectors is required in addition to that required for SDM to monitor reactor core margins to thermal limits in MODE 1 with THERMAL POWER ≥ 25%.

In addition to the minimum required inputs for the core monitoring system as governed by TS 3.2.5, additional inputs are also used. The core monitoring system primarily uses control rod position from the group demand indicators to perform the necessary calculations. In order to calculate margins to thermal and SDM limits correctly in the event control rods are misaligned or inoperable, it is necessary that operations personnel update the data used by the core monitoring system so that the correct position and operability status is used. An interface is provided through control room work stations to facilitate this action. Options to enter operability status, a fixed position or the instruction for the core monitoring system to use the individual rod position from the DRPI signal are available.

These additional input signals are not continuously monitored by the core monitoring system and loss or degradation of this data will not result in an alarm. Therefore, a CHANNEL CHECK of this additional data is provided to ensure the data transfer is functioning correctly and the data is of adequate quality. Operating experience with similar core monitoring system inputs indicates a frequency of 7 days for the data check is adequate.

TRM 3.3 INSTRUMENTATION

TRM 3.3.1 Diverse Actuation System (DAS) Automatic Actuation

TR 3.3.1 DAS automatic actuation functions and DAS automatic actuation initiation signals listed in Table TR 3.3.1-1 shall be FUNCTIONAL.

APPLICABILITY: According to Table TR 3.3.1-1.

ACTIONS

- NOTE -

Separate condition entry is allowed for each actuation function.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more automatic actuation functions with one or more required channels not FUNCTIONAL.	A.1 Restore required channel(s) to FUNCTIONAL status.	14 days

TECHNICAL REQUIREMENT SURVEILLANCE

- NOTE -

Refer to Table TR 3.3.1-1 to determine which TRSs apply for each actuation function.

SURVEILLANCE		FREQUENCY
TRS 3.3.1.1	Perform CHANNEL CHECK on each required channel.	30 hours
TRS 3.3.1.2	Perform CHANNEL OPERATIONAL TEST (COT) on each required channel.	92 days
TRS 3.3.1.3	Perform CHANNEL CALIBRATION on each required channel.	24 months
TRS 3.3.1.4	--- **– NOTE –** Only required to be met in MODE 1. --- Verify rod drive MG set field control relays open on demand.	24 months

Table TR 3.3.1-1 (page 1 of 1)
DAS Automatic Actuation Functions

ACTUATION FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS	TECHNICAL REQUIREMENT SURVEILLANCE
1. SG Wide Range Level – Low[(a)]	1,2,3,4[(b)]	1 per SG	TRS 3.3.1.1 TRS 3.3.1.2 TRS 3.3.1.3 TRS 3.3.1.4
2. Hot Leg Temperature – High[(a)]	1,2,3,4,5[(c)]	1 per Hot Leg	TRS 3.3.1.1 TRS 3.3.1.2 TRS 3.3.1.3 TRS 3.3.1.4
3. Pressurizer Level - Low	1,2,3,4,5[(d)]	2	TRS 3.3.1.1 TRS 3.3.1.2 TRS 3.3.1.3
4. Containment Temperature - High	1,2,3,4	2	TRS 3.3.1.1 TRS 3.3.1.2 TRS 3.3.1.3

(a) DAS ATWS mitigation functions of reactor trip and turbine trip actuation are only required in MODE 1.

(b) With the RCS not being cooled by the normal residual heat removal system (RNS).

(c) With the RCS pressure boundary intact and pressurizer level ≥ 20%. Not required to be FUNCTIONAL in MODE 5 during RCS vacuum fill operations.

(d) With the RCS not VENTED and CMT actuation on Pressurizer Level - Low not blocked.

TRM 3.3.1 Diverse Actuation System (DAS) Automatic Actuation

BASES

The DAS automatic actuation functions include: (1) the DAS ATWS mitigation functions of reactor trip (i.e., MG set field control relay open), turbine trip, and passive residual heat removal heat exchanger (PRHR HX) actuation; and (2) the DAS Engineered Safety Features Actuation (ESFA) functions of PRHR HX actuation, CMT actuation, RCP trip, Passive Containment Cooling actuation, and selected containment isolation actuation.

The DAS ATWS mitigation function actuation provides ATWS mitigation capability on:

- SG Wide Range Level – Low; and
- Hot Leg Temperature – High.

This function is important based on 10 CFR 50.62 (ATWS Rule) and because it provides margin in the PRA sensitivity performed assuming no credit for nonsafety-related SSCs to mitigate at-power and shutdown events. The margin provided in the PRA study assumes a minimum availability of 90% for this function during the Applicability, considering both maintenance unavailability and failures to actuate.

The DAS ESFA functions provide accident mitigation capability on:

- SG Wide Range Level – Low;
- Hot Leg Temperature – High;
- Pressurizer Level – Low; and
- Containment Temperature - High.

This function is important because it provides margin in the PRA sensitivity performed assuming no credit for nonsafety-related SSCs to mitigate at-power and shutdown events. The margin provided in the PRA study assumes a minimum availability of 90% for this function during the Applicability, considering both maintenance unavailability and failures to actuate.

The DAS uses a 2-out-of-2 logic to actuate automatic functions. When a required channel is not FUNCTIONAL the automatic DAS function is not FUNCTIONAL. FSAR subsection 7.7.1.11 (Ref. 1) provides additional information. A Note has been added in the ACTIONS to clarify the application of Completion Time rules. The Conditions of this Technical Requirement may be entered independently for each non-FUNCTIONAL actuation function listed in Table TR 3.3.1-1.

Table TR 3.3.1-1 DAS function nominal trip setpoints are determined using the setpoint methodology referenced in FSAR subsection 7.7.1.11 (Ref. 1). The nominal trip setpoints in the setpoints program results report (Ref. 2) are used to support the necessary surveillance testing. The nominal trip setpoint is a digital value and, therefore, does not drift.

Automated operator aids may be used to facilitate performance of the CHANNEL CHECK. An automated tester may be used to facilitate performance of the CHANNEL OPERATIONAL TEST.

BASES (continued)

The DAS ATWS mitigation function is required during MODE 1 when ATWS is a limiting event. Planned maintenance affecting the DAS ATWS mitigation function should be performed in MODES 3, 4, 5 or 6. These MODES are selected because the reactor is tripped in these MODES and ATWS cannot occur. The DAS ESFA mitigation functions are required during MODES in which the DAS provides backup to the automatic protection system functions as described in the following paragraphs, which is when automatic DAS ESFA is beneficial to the PRA results. Planned maintenance affecting overall FUNCTIONALITY of the ESFA mitigation functions should not be performed during a required MODE of operation.

The SG Wide Range Level – Low actuation function is required during MODES 1, 2, and 3 and during MODE 4 with the RCS not being cooled by the RNS. Planned maintenance affecting the SG Wide Range Level – Low actuation function should be performed during MODE 4 with the RCS being cooled by the RNS or during MODES 5 or 6, which is when the steam generators are no longer being relied upon as a heat sink.

The Hot Leg Temperature – High actuation function is required during MODES 1, 2, 3, and 4, and during MODE 5 when the RCS pressure boundary intact and pressurizer level ≥ 20%, which is when the PRHR HX can provide core cooling. This actuation function is not required during vacuum fill, which hinders natural circulation through the PRHR HX. Planned maintenance affecting the Hot Leg Temperature – High actuation function should be performed while the RCS pressure boundary is not intact, when natural circulation through the PRHR HX is inhibited and automatic PRHR HX actuation is not required.

The Pressurizer Level – Low actuation function is required during MODES 1, 2, 3, and 4, and during MODE 5 when the RCS is not VENTED and CMT actuation on Pressurizer Level – Low is not blocked, which is when automatic DAS actuation of the CMTs is required to provide borated water for RCS inventory makeup and reactivity control. Planned maintenance affecting the Pressurizer Level – Low actuation function should be performed during MODE 5 after a vent has been established or in MODE 6, when injection from the IRWST is available to provide RCS makeup and boration.

The Containment Temperature – High actuation function is required during MODES 1, 2, 3, and 4, which is when containment integrity is required. Planned maintenance affecting the Containment Temperature – High actuation function should be performed in MODES 5 or 6 when containment isolation is administratively controlled.

REFERENCES

1. FSAR Section 7.7.1.11, “Diverse Actuation System.”

2. SV0-PMS-GS-001, Protection and Safety Monitoring System and Diverse Actuation System Setpoints for the Vogtle Units 3 and 4 Plants, Revision 1, August 2021.

TRM 3.3 INSTRUMENTATION

TRM 3.3.2 Feedwater Flow

TR 3.3.2 Caldon/Cameron Leading Edge Flow Meter (LEFM) CheckPlus system feedwater flow calorimetric input shall be FUNCTIONAL.

APPLICABILITY: MODE 1 with THERMAL POWER > 3366 MWt.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. LEFM CheckPlus system not FUNCTIONAL.	A.1 Initiate action to verify calorimetric power is utilizing feedwater flow input from venturi elements.	Immediately
	AND	
	A.2 Restore LEFM CheckPlus system to FUNCTIONAL status.	48 hours
B. Required action and associated Completion Time not met.	B.1 Initiate action to reduce THERMAL POWER to ≤ 3366 MWt.	Immediately

TECHNICAL REQUIREMENT SURVEILLANCE

SURVEILLANCE		FREQUENCY
TRS 3.3.2.1	Perform CHANNEL CHECK on LEFM CheckPlus system feedwater flow calorimetric input.	24 hours
TRS 3.3.2.2	Perform CHANNEL CALIBRATION and preventative maintenance on the required plane in accordance with LEFM CheckPlus system technical manuals and recommendations.	Per technical manuals and recommendations

TRM 3.3.2 Feedwater Flow

Bases

The plant operating instrumentation selected for feedwater flow measurement is a Caldon [Cameron] LEFM CheckPlus System. This selected plant operating instrumentation has documented instrumentation uncertainties to calculate a power calorimetric uncertainty that confirms the 1% uncertainty assumed for the initial reactor power in the safety analysis bounds the calculated calorimetric power uncertainty values. While the main feedwater flow measurement supports a 1% RTP uncertainty, the safety analysis uses a conservative 2% RTP uncertainty (i.e., initial power of 102% [3468 MWt]).

The Caldon/Cameron LEFM CheckPlus System consists of two ultrasonic flow meters (UFMs), one in each steam generator loop, to measure volumetric flow rates. Volumetric flow rate measurements are made by the UFM transmitters. Each UFM has two transmitters. Each transmitter is connected to one measurement plane. Each measurement plane is comprised of 4 acoustic measurement chords or paths. A measurement path consists of two transducers aiming at each other, through the pressure boundary transducer housing. An acoustic pulse is transmitted along each path and the receiver records the arrival of the pulse. Another pulse is transmitted in the opposite direction and the time for that pulse is also recorded. Since the speed of an acoustic pulse will increase in the direction of flow and will decrease when transmitted against the flow, the difference in the upstream and downstream transit times for the acoustic pulse provides information on flow velocity. Once the difference in travel times is determined, the average velocity of the fluid along the acoustic path can be determined. Therefore, the difference in transit time is proportional to the average velocity of the fluid along the acoustic path.

Both LEFM CheckPlus System Status registers return maintained integers to the Data Display and Processing System (DDS) representative of the UFM Status condition for Stem Generator Loops 1 and 2. The maintained Status integers are 0, 1, 2, and 3, representative of the individual UFM health. A UFM Status register returns a 0 when the system is operating without error. This indicates that the UFM is functioning with two measurement planes. The guaranteed instrument flow uncertainty associated with Status 0 is less than the 1% RTP uncertainty allowance assumed for the initial reactor power in the safety analysis. A UFM Status register returns a 1 when a minor alert is present. This indicates that minor maintenance is required, and that the system is functioning with two measurement planes. The guaranteed instrument flow uncertainty associated with Status 1 is less than the 1% RTP uncertainty allowance assumed for the initial reactor power in the safety analysis. A UFM Status register returns a 2 when a major alert is present. This indicates that a critical maintenance condition exists, and the system is functioning with only one measurement plane. The guaranteed instrument flow uncertainty increases in Status 2 but remains less than the 1% RTP uncertainty allowance assumed for the initial reactor power in the safety analysis. A UFM Status register returns a 3 when the system is not FUNCTIONAL. This indicates that a critical maintenance condition exists, and measurement uncertainty cannot be guaranteed.

The LEFM CheckPlus System may only be used as input to the feedwater flow power calorimetric when the guaranteed uncertainty of the UFMs is less than or equal to the bounding uncertainty assumed in the Power Calorimetric Measurement Uncertainty calculation.

Bases (continued)

This provides a calorimetric input uncertainty that is less than the calorimetric power uncertainty allowance of 1% assumed for the initial reactor power in the safety analysis. As such, the UFM must be operating with a Status of 0, 1, or 2 to meet the uncertainty requirements. The LEFM CheckPlus System is considered FUNCTIONAL when both Loop 1 and Loop 2 UFMs are operating in Status 0, 1, or 2.

Operation at indicated core power levels at 3400 MWt (i.e., RATED THERMAL POWER) requires a calorimetric power uncertainty determination of less than 2.0%. This is only possible if the LEFM CheckPlus System feedwater flow instrumentation is available as the input to the calorimetric is FUNCTIONAL. The LEFM system measures and transmits data with lower uncertainty than the instrumentation from the feedwater flow venturi. The feedwater flow venturi input to the calorimetric will support operation above 3366 MWt for up to 48 hours while the LEFM system is not FUNCTIONAL. Upon the expiration of the 48-hour Completion Time, action is immediately initiated to reduce reactor core power to ≤ 3366 MWt.

TRM 3.6 CONTAINMENT SYSTEMS

TRM 3.6.1 Passive Containment Cooling Water Storage Tank (PCCWST) and Spent Fuel Pool Makeup - Long Term Shutdown

TR 3.6.1 Long term makeup to the PCCWST and the spent fuel pool shall be FUNCTIONAL.

APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6,

When irradiated fuel assemblies are stored in the spent fuel pool.

- NOTES -

1. Makeup flow path to the PCCWST is only required to be FUNCTIONAL when the core decay heat is > 4.0 MWt.
2. Makeup flow path to the spent fuel pool is only required to be FUNCTIONAL when irradiated fuel assemblies are stored in the spent fuel pool.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Required long term makeup to the PCCWST not FUNCTIONAL.	A.1 Restore required long term makeup to the PCCWST to FUNCTIONAL status.	14 days
B. Required long term makeup to the spent fuel pool not FUNCTIONAL.	B.1 Restore required long term makeup to the spent fuel pool to FUNCTIONAL status.	14 days

TECHNICAL REQUIREMENT SURVEILLANCE

SURVEILLANCE		FREQUENCY
TRS 3.6.1.1	Verify water volume in the PCCAWST is > 885,000 gal.	31 days
TRS 3.6.1.2	Verify required PCS recirculation pump provides recirculation of the PCCWST at > 100 gpm.	92 days
TRS 3.6.1.3	Verify required PCS recirculation pump transfers > 100 gpm from the PCCAWST to the PCCWST. During this test, required PCS recirculation pump shall be powered from an ancillary diesel.	10 years

TRM 3.6.1 Passive Containment Cooling Water Storage Tank (PCCWST) and Spent Fuel Pool Makeup - Long Term Shutdown

BASES

The PCS recirculation pumps provide long-term shutdown support by transferring water from the PCCAWST to the PCCWST and the spent fuel pool. The specified PCCAWST volume is sufficient to maintain PCS and spent fuel pool cooling during the 3 to 7 day time period following an accident. The specified PCCAWST volume includes the base amount of water needed to provide 135 gpm for four days (780,000 gal.) plus an additional volume intended to provide margin for potential instrument inaccuracies, mis-positioning of flow control valve, and makeup inventory for the fire protection system. After 7 days, water brought in from offsite allows the PCCWST to continue to provide PCS cooling and makeup to the spent fuel pool. This PCCWST makeup function is important because it supports long-term shutdown operation. A minimum availability of 90% is assumed for this function during the Applicability, considering both maintenance unavailability and failures to operate.

The PCCWST and spent fuel pool makeup functions involve the use of one PCS recirculation pump, the PCCAWST and the line connecting the PCCAWST with the PCCWST and/or spent fuel pool. The flow path between the PCCAWST and PCS-V023 (PCS Recirculation Return Isolation Valve) is common to both makeup functions. Downstream of PCS-V023, the flow path to the spent fuel pool branches off from the flow path to the PCCWST. One PCS recirculation pump normally operates to recirculate the PCCWST. FSAR subsections 6.2.2 and 9.1.3 contain additional information on the long-term PCCWST and spent fuel pool makeup function.

The PCCWST and spent fuel pool makeup functions are required during MODES of operation when PCS and spent fuel pool cooling is required.

Planned maintenance should be performed on the redundant pump (i.e., the pump not required to be FUNCTIONAL). Planned maintenance affecting the PCCAWST that requires less than 72 hours to perform can be performed in any MODE of operation. Planned maintenance requiring more than 72 hours should be performed in MODE 5 or 6 when the core decay heat is ≤ 4.0 MWt and an alternate means of makeup to the spent fuel pool is available for the duration of the maintenance based on stored decay heat load. The basis for this recommendation is that the long-term PCS makeup to the PCCWST is not required in this condition, the PCCWST, along with other makeup sources can provide the required makeup to the spent fuel pool.

TRM 3.6 CONTAINMENT SYSTEMS

TRM 3.6.2 Hydrogen Igniters

TR 3.6.2 Hydrogen igniters shall be FUNCTIONAL in accordance with Table TR 3.6.2-1.

APPLICABILITY: MODES 1 and 2,
MODE 5 with RCS pressure boundary open,
MODE 6 with upper internals in place,
MODE 6 with cavity level < 23 feet above the top of the reactor vessel flange.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more required hydrogen igniters not FUNCTIONAL.	A.1 Restore required igniters to FUNCTIONAL status.	14 days

TECHNICAL REQUIREMENT SURVEILLANCE

SURVEILLANCE		FREQUENCY
TRS 3.6.2.1	Energize each required hydrogen igniter and verify the surface temperature is ≥ 1700°F.	Each refueling outage

Table TR 3.6.2-1 (page 1 of 1)
Hydrogen Igniters

	LOCATION	REQUIRED IGNITERS
1.	Loop Compartment 01	3
2.	Loop Compartment 02	3
3.	Pressurizer Compartment	3
4.	Tunnel connecting Loop Compartments	5
5.	Southeast Valve Room & Southeast Accumulator Room	2
6.	East Valve Room, Northeast Accumulator Room, & Northeast Valve Room	2(1)
7.	North CVS Equipment Room	2
8.	Lower Compartment Area (CMT and Valve Area)	10
9.	IRWST Sparger Side	2
10.	IRWST Vacuum Breaker Vents	2
11.	IRWST Roof Vents	2
12.	IRWST Hooded Vents	3
13.	Refueling Cavity	3
14.	Upper Compartment - Lower Region	9
15.	Upper Compartment - Mid Region	3
16.	Upper Compartment - Upper Region	3

NOTE:
(1) Igniter 18 and either Igniter 17 or Igniter 19.

TRM 3.6.2 Hydrogen Igniters

Bases

The hydrogen igniters are required to provide the capability of burning hydrogen generated during severe accidents in order to prevent failure of the containment due to hydrogen detonation. These hydrogen igniters are required by 10 CFR 50.34 to limit the buildup of hydrogen to less than 10% assuming that 100% of the active zircaloy fuel cladding is oxidized.

This function is also important because it provides margin in the PRA sensitivity performed assuming no credit for nonsafety-related SSCs to mitigate at-power and shutdown events. The margin provided in the PRA study assumes a minimum availability of 90% for this function during the Applicability, considering both maintenance unavailability and failures to operate.

The igniters are distributed in the containment to limit the buildup of hydrogen in local areas. Two groups of igniters are provided in each area; one of which is sufficient to limit the buildup of hydrogen. When an igniter is energized, the igniter surface heats up to ≥ 1700°F. This temperature is sufficient to ignite hydrogen in the vicinity of the igniter when the lower flammability limit is reached. FSAR subsection 6.2.4 provides additional information.

The hydrogen igniter function is required during MODES 1 and 2 when core decay heat is high and during MODE 5 when the RCS pressure boundary is open and in MODE 6 with cavity level < 23 feet above the top of the reactor vessel flange. MODES 1, 2, 5, and 6 were selected as MODES at risk for a severe accident event occurrence combined with the production and burning of hydrogen, with MODES 3 and 4 excluded due to low risk for an event at these initial conditions. This selection excludes MODES with a low probability of event occurence and low reliability on the hydrogen igniters where maintenance can be performed. Table TR 3.6.2-1 indicates the minimum number of hydrogen igniters that are required.

TRM 3.7 PLANT SYSTEMS

TRM 3.7.1 Normal Residual Heat Removal System (RNS) - Reactor Coolant System (RCS) Makeup

TR 3.7.1 One train of RNS - RCS makeup shall be FUNCTIONAL.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Required RNS - RCS makeup train not FUNCTIONAL.	A.1 Restore required RNS - RCS makeup train to FUNCTIONAL status.	14 days

TECHNICAL REQUIREMENT SURVEILLANCE

SURVEILLANCE		FREQUENCY
TRS 3.7.1.1	Verify required RNS pump develops a differential head of 330 feet on recirculation flow.	92 days
TRS 3.7.1.2	Verify the following valves stroke open: RNS V011, RNS Discharge Containment Isolation RNS V022, RNS Suction Header Containment Isolation RNS V023, RNS Suction from IRWST Isolation RNS V055, RNS Suction from Cask Loading Pit	92 days

TRM 3.7.1 Normal Residual Heat Removal System (RNS) - Reactor Coolant System (RCS) Makeup

Bases

The RNS – RCS makeup function provides a nonsafety-related means of injecting water from the cask loading pit (CLP) into the RCS and water from the IRWST into the RCS following ADS actuations. The RNS – RCS makeup function is important because it provides margin in the PRA sensitivity performed assuming no credit for nonsafety-related SSCs to mitigate at-power and shutdown events. The margin provided in the PRA study assumes a minimum availability of 90% for this function during the Applicability, considering both maintenance unavailability and failures to operate.

One train of RNS – RCS makeup includes one RNS pump, the lines from the CLP and the IRWST to the RCS, and RNS valves V011, V022, V023 and V055. This equipment does not normally operate during MODES 1, 2, and 3. FSAR subsection 5.4.7 contains additional information on the RNS.

The RNS – RCS makeup function is required during MODES 1, 2, and 3 because decay heat is higher and the need for ADS is greater.

Planned maintenance on redundant RNS SSCs should be performed during MODE 1, 2, or 3. Such maintenance should be performed on an RNS SSC not required to be FUNCTIONAL. The basis for this recommendation is that the RNS is more risk important during shutdown MODES when it is normally operating than during other MODES when it only provides a backup to PXS injection.

Planned maintenance on non-redundant RNS valves (such as V011, V022, V023, V055) should be performed to minimize the impact on their RNS – RCS makeup and their containment isolation capability. Non-pressure boundary maintenance should be performed during MODE 5 with a visible pressurizer level or MODE 6 with cavity level ≥ 23 feet above the top of the reactor vessel flange. In these MODES, these valves need to be open but they do not need to be able to close. Containment closure which is required in these MODES can be satisfied by one normally open operable valve. Pressure boundary maintenance can not be performed during MODES when the RNS is used to cool the core, therefore such maintenance should be performed during MODE 1, 2, or 3. Since these valves are also containment isolation valves, maintenance that renders the valves inoperable requires that the containment isolation valve located in series with the inoperable valve has to be closed and de-activated. The basis for this recommendation is that the RNS is more risk important during shutdown MODES when it is normally operating than during other MODES when it only provides a backup to PXS injection. In addition, it is not possible to perform pressure boundary maintenance of these valves during RNS operation.

TRM 3.7 PLANT SYSTEMS

TRM 3.7.2 Normal Residual Heat Removal System (RNS) – Reactor Coolant System (RCS) Open

TR 3.7.2 Two trains of RNS RCS shutdown heat removal shall be FUNCTIONAL and one RNS pump in operation.

APPLICABILITY: MODE 5 with RCS pressure boundary open,
MODE 6 with with upper internals in place,
MODE 6 with cavity level < 23 feet above the top of the reactor vessel flange.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One RNS RCS shutdown heat removal train not FUNCTIONAL.	A.1 Initiate actions to increase the water inventory above the core.	12 hours
<u>OR</u>	<u>AND</u>	
Required RNS pump not in operation.	A.2 Restore two trains of RNS RCS shutdown heat removal to FUNCTIONAL status and one RNS pump in operation.	72 hours

TECHNICAL REQUIREMENT SURVEILLANCE

SURVEILLANCE		FREQUENCY
TRS 3.7.2.1	Verify one RNS pump is in operation and that the required RNS pump circulates reactor coolant at a flow > 1580 gpm. <u>OR</u> Verify both RNS pumps are in operation and circulating reactor coolant at a flow > 2000 gpm.	Within 24 hours prior to entering the Applicability

TRM 3.7.2 Normal Residual Heat Removal System (RNS) – Reactor Coolant System (RCS) Open

Bases

The RNS cooling function provides a nonsafety-related means to normally cool the RCS during shutdown operations (MODES 4, 5, and 6). This RNS cooling function is important during conditions when the RCS pressure boundary is open and the refueling cavity is not flooded because it reduces the probability of an initiating event due to loss of RNS cooling and because it provides margin in the PRA sensitivity performed assuming no credit for nonsafety-related SSCs to mitigate at-power and shutdown events. The RCS is considered open when its pressure boundary is not intact. The margin provided in the PRA study assumes a minimum availability of 90% for this function during the Applicability, considering both maintenance unavailability and failures to operate.

The RNS cooling of the RCS involves the RNS suction line from the RCS HL, the two RNS pumps and the RNS discharge line returning to the RCS through the DVI lines. Prior to entering the Applicability, one of the RNS pumps has to be operating. The other pump may be operating or may be in standby. If one RNS pump and HX are in standby, the system shall be arranged such that the standby pump and HX can be placed into service from the main control room. FSAR subsection 5.4.7 contains additional information on the RNS.

Both RNS pumps are required during the Applicability when the loss of RNS cooling is risk important. If both RNS pumps are not FUNCTIONAL, the plant should not enter these conditions. If the plant has entered reduced inventory conditions, then the plant should take action to restore full system operation or leave the Applicability. If the plant has not restored full system operation or left the Applicability within 12 hours, then actions need to be initiated to increase the RCS water level to either 20% pressurizer level or to a refueling cavity ≥ 23 ft.

Planned maintenance affecting this RNS cooling function should be performed in MODE 1, 2, or 3, or in MODE 6 with a refueling cavity level ≥ 23 ft above the top of the reactor vessel flange when the RNS is not considered risk significant. The basis for this recommendation is that the RNS is more risk important during the Applicability conditions than during other MODES when it only provides a backup to PXS injection.

TRM 3.7 PLANT SYSTEMS

TRM 3.7.3 Component Cooling Water System (CCS) – Reactor Coolant System (RCS) Open

TR 3.7.3 Two CCS trains shall be FUNCTIONAL and one CCS pump in operation to support the operating Normal Residual Heat Removal System (RNS) RCS shutdown heat removal train.

APPLICABILITY: MODE 5 with RCS pressure boundary open,
MODE 6 with with upper internals in place,
MODE 6 with cavity level < 23 feet above the top of the reactor vessel flange.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One CCS train not FUNCTIONAL. <u>OR</u> Required CCS pump not in operation to support operating RNS RCS shutdown heat removal train.	A.1 Initiate actions to increase the water inventory above the core. <u>AND</u> A.2 Restore two CCS trains to FUNCTIONAL status and one CCS pump in operation to support operating RNS RCS shutdown heat removal train.	12 hours 72 hours

TECHNICAL REQUIREMENT SURVEILLANCE

SURVEILLANCE		FREQUENCY
TRS 3.7.3.1	Verify one CCS pump is in operation and each CCS pump operating individually can provide a CCS flow through one RNS heat exchanger > 2685 gpm. <u>OR</u> Verify both CCS pumps are in operation with CCS flow through each RNS heat exchanger > 2685 gpm.	Within 24 hours prior to entering the Applicability

TRM 3.7.3 Component Cooling Water System (CCS) – Reactor Coolant System (RCS) Open

Bases

The CCS cooling of the RNS HXs provides a nonsafety-related means to normally cool the RCS during shutdown operations (MODES 4, 5, and 6). This RNS cooling function is important because it reduces the probability of an initiating event due to loss of RNS cooling and because it provides margin in the PRA sensitivity performed assuming no credit for nonsafety-related SSCs to mitigate at-power and shutdown events. The RCS is considered open when its pressure boundary is not intact. The margin provided in the PRA study assumes a minimum availability of 90% for this function during the Applicability, considering both maintenance unavailability and failures to operate.

The CCS cooling of the RNS involves two CCS pumps and HXs and the CCS line to the RNS HXs. Prior to entering the Applicability, one of the CCS pumps and its HX has to be operating. One of the lines to a RNS HX also has to be open. The other CCS pump and HX may be operating or may be in standby. If one CCS pump and HX are in standby, the system shall be arranged such that the standby pump can be placed into service from the main control room. FSAR subsection 9.2.2 contains additional information on the CCS.

Both CCS pumps are required during the Applicability when the loss of RNS cooling is risk important. If both CCS pumps are not FUNCTIONAL, the plant should not enter these conditions. If the plant has entered these conditions, then the plant should take action to restore both CCS pumps or to leave these conditions. If the plant has not restored full system operation or left the Applicability within 12 hours, then actions need to be initiated to increase the RCS water level to either 20% pressurizer level or to a refueling cavity ≥ 23 ft.

Planned maintenance affecting this CCS cooling function should be performed in MODE 1, 2, or 3 when the CCS is not supporting RNS operation. The basis for this recommendation is that the CCS is more risk important during shutdown MODES, especially during the Applicability conditions than during other MODES.

TRM 3.7 PLANT SYSTEMS

TRM 3.7.4 Service Water System (SWS) – Reactor Coolant System (RCS) Open

TR 3.7.4 Two SWS trains shall be FUNCTIONAL and one SWS pump in operation to support Component Cooling Water System (CCS) cooling.

APPLICABILITY: MODE 5 with RCS pressure boundary open,
MODE 6 with with upper internals in place,
MODE 6 with cavity level < 23 feet above the top of the reactor vessel flange.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One SWS train not FUNCTIONAL.	A.1 Initiate actions to increase the water inventory above the core.	12 hours
OR	AND	
Required SWS pump not in operation to support CCS cooling.	A.2 Restore two SWS trains to FUNCTIONAL status and one SWS pump in operation to support CCS cooling.	72 hours

TECHNICAL REQUIREMENT SURVEILLANCE

SURVEILLANCE		FREQUENCY
TRS 3.7.4.1	Verify one SWS pump is in operation and each SWS pump operating individually can provide a SWS flow > 10,000 gpm.	Within 24 hours prior to entering the Applicability
TRS 3.7.4.2	Operate each cooling tower fan for > 15 min.	Within 24 hours prior to entering the Applicability

TRM 3.7.4 Service Water System (SWS) – Reactor Coolant System (RCS) Open

Bases

The SWS cooling of the CCS HXs provides a nonsafety-related means to normally cool the RNS HX which cools the RCS during shutdown operations (MODES 4, 5, and 6). This RNS cooling function is important because it reduces the probability of an initiating event due to loss of RNS cooling and because it provides margin in the PRA sensitivity performed assuming no credit for nonsafety-related SSCs to mitigate at-power and shutdown events. The RCS is considered open when its pressure boundary is not intact. The margin provided in the PRA study assumes a minimum availability of 90% for this function during the Applicability, considering both maintenance unavailability and failures to operate.

The SWS cooling of the CCS HXs involves two SWS pumps and cooling tower fans and the SWS line to the CCS HXs. Prior to entering the Applicability, one of the SWS pumps and its cooling tower fan has to be operating. The other SWS pump and cooling tower fan may be operating or may be in standby. If one SWS pump and cooling tower fan are in standby, the system shall be arranged such that the standby pump and cooling tower fan can be placed into service from the main control room. FSAR subsection 9.2.1 contains additional information on the SWS.

Both SWS pumps and cooling tower fans are required during the Applicability when the loss of RNS cooling is risk important. If both SWS pumps and cooling tower fans are not FUNCTIONAL, the plant should not enter these conditions. If the plant has entered these conditions, then the plant should take action to restore both SWS pumps / fans or to leave these conditions. If the plant has not restored full system operation or left the Applicability within 12 hours, then actions need to be initiated to increase the RCS water level to either 20% pressurizer level or to a refueling cavity ≥ 23 ft.

Planned maintenance affecting this SWS cooling function should be performed in MODES when the SWS is not supporting RNS operation, i.e., during MODE 1, 2, or 3. The basis for this recommendation is that the SWS is more risk important during shutdown MODES, especially during the Applicability conditions than during other MODES.

TRM 3.7 PLANT SYSTEMS

TRM 3.7.5 Main Control Room (MCR) Cooling - Long Term Shutdown

TR 3.7.5 Long term cooling of the MCR shall be FUNCTIONAL.

APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Required MCR ancillary fan not FUNCTIONAL.	A.1 Restore required MCR ancillary fan to FUNCTIONAL status.	14 days

TECHNICAL REQUIREMENT SURVEILLANCE

SURVEILLANCE		FREQUENCY
TRS 3.7.5.1	Operate required MCR ancillary fan for > 15 min.	92 days
TRS 3.7.5.2	Verify required MCR ancillary fan can provide a flow of air into the MCR for > 15 min. During this test, the required MCR ancillary fan will be powered from an ancillary diesel.	10 years

TRM 3.7.5 Main Control Room (MCR) Cooling - Long Term Shutdown

Bases

The MCR ancillary fans provide long term shutdown support by cooling the main control room. For the first three days after an accident the emergency HVAC system (VES) together with the passive heat sinks in the MCR provide cooling of the MCR. After 3 days, the MCR ancillary fans can be used to circulate ambient air through the MCR to provide cooling. The long term MCR cooling function is required during all MODES of operation. This long term MCR cooling function is important because it supports long-term shutdown operation. A minimum availability of 90% is assumed for this function during the Applicability, considering both maintenance unavailability and failures to operate.

The long term MCR cooling function involves the use of a MCR ancillary fan. During TRS 3.7.5.1 the required fan will be run to verify that it operates without providing flow to the MCR. During TRS 3.7.5.2 the required fan will be connected to the MCR and operated such that it provides flow to the MCR. FSAR subsection 9.4.1 contains additional information on the long term MCR cooling function.

One MCR ancillary fan is required during all MODES of plant operation. Planned maintenance should not be performed on the required MCR ancillary fan during a required MODE of operation; planned maintenance should be performed on the redundant MCR ancillary fan (i.e., the fan not required to be FUNCTIONAL) during MODE 3 or 4, MODE 5 with a visible pressurizer level, or MODE 6 with the refueling cavity ≥ 23 ft; these MODES are selected because the reactor is tripped in these MODES and the risk of core damage is low.

TRM 3.7 PLANT SYSTEMS

TRM 3.7.6 I&C Room Cooling - Long Term Shutdown

TR 3.7.6 Long term cooling of I&C room B or I&C room C shall be FUNCTIONAL.

APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Required I&C room ancillary fan not FUNCTIONAL.	A.1 Restore required I&C room ancillary fan to FUNCTIONAL status.	14 days

TECHNICAL REQUIREMENT SURVEILLANCE

SURVEILLANCE		FREQUENCY
TRS 3.7.6.1	Operate required I&C room ancillary fan for > 15 min.	92 days
TRS 3.7.6.2	Verify required I&C room ancillary fan can provide a flow of air into an I&C room for > 15 min. During this test, the required I&C room ancillary fan will be powered from its associated ancillary diesel.	10 years

TRM 3.7.6 I&C Room Cooling - Long Term Shutdown

Bases

The I&C room ancillary fans provide long term shutdown support by cooling I&C rooms B & C, which contain post accident instrument processing equipment. For the first three days after an accident the passive heat sinks in the I&C rooms provide cooling. After 3 days, the I&C room ancillary fans can be used to circulate ambient air through the I&C rooms to provide cooling. The long term I&C room cooling function is required during all MODES of operation. This long term I&C room cooling function is important because it supports long-term shutdown operation. A minimum availability of 90% is assumed for this function during the Applicability, considering both maintenance unavailability and failures to operate.

The long term I&C room cooling function involves the use of two I&C room ancillary fans. Each I&C room ancillary fan is associated with one I&C room (B or C) and one ancillary diesel generator. Each of the I&C room ancillary fans is permanently installed in its associated I&C room ductwork. During TRS 3.7.6.1, the required I&C room ancillary fan will be run to verify that it operates. During TRS 3.7.6.2, the required I&C room ancillary fan will be powered from the required ancillary diesel generator; and will be operated such that the fan provides the cooling required for the I&C room. FSAR subsection 9.4.1 contains additional information on the long term I&C room cooling function.

One I&C room ancillary fan is required during all MODES of plant operation. Planned maintenance should not be performed on the required I&C room ancillary fan during a required MODE of operation. Planned maintenance should be performed on the redundant I&C room ancillary fan.

TRM 3.8 ELECTRICAL POWER SYSTEMS

TRM 3.8.1 AC Power Supplies - Operating

TR 3.8.1 One standby diesel generator shall be FUNCTIONAL.

APPLICABILITY: MODES 1, 2, 3, 4, and 5.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Fuel volume in required standby diesel fuel tank ≤ 55,000 gal.	A.1 Restore fuel volume in required standby diesel fuel tank to > 55,000 gal.	14 days
B. Required fuel transfer pump not FUNCTIONAL. OR Required standby diesel generator not FUNCTIONAL for reasons other than Condition A.	B.1 Restore required fuel transfer pump and required standby diesel generator to FUNCTIONAL status.	14 days

TECHNICAL REQUIREMENT SURVEILLANCE

SURVEILLANCE		FREQUENCY
TRS 3.8.1.1	Verify fuel oil volume in required standby diesel generator fuel tank is > 55,000 gal.	31 days
TRS 3.8.1.2	Verify required fuel oil transfer pump provides a recirculation flow of > 8 gpm.	92 days
TRS 3.8.1.3	Verify required standby diesel generator starts and operates at > 4000 kw for > 1 hour. This test may utilize diesel engine prelube prior to starting and a warmup period prior to loading.	92 days
TRS 3.8.1.4	Verify the required standby diesel generator starts and operates at > 4000 kw for > 24 hours. This test may utilize diesel engine prelube prior to starting and a warmup period prior to loading.	10 years
TRS 3.8.1.5	Verify the required standby diesel generator starts and operates (unloaded). This test may utilize diesel engine prelube prior to starting. Both diesel generators shall be started at the same time for this test.	10 years

TRM 3.8.1 AC Power Supplies - Operating

Bases

AC power is required to power the RNS and to provide a nonsafety-related means of supplying power to the safety-related PMS for actuation and post accident monitoring. The RNS provides a nonsafety-related means to inject water into the RCS following ADS actuations in MODES 1, 2, 3, and 4 (when steam generators cool the RCS). This AC power supply function is important because it adds margin to the PRA sensitivity performed assuming no credit for nonsafety-related SSCs to mitigate at-power and shutdown events. The margin provided in the PRA study assumes a minimum availability of 90% for this function during the Applicability, considering both maintenance unavailability and failures to operate.

Two standby diesel generators are provided. Each standby diesel generator has its own fuel oil transfer pump and fuel oil tank. The volume of fuel oil required is that volume that is above the connection to the fuel oil transfer pump. FSAR subsection 8.3.1 contains additional information.

This AC power supply function is required during MODES 1, 2, 3, 4, and 5 when RNS injection and PMS actuation are more risk important. Planned maintenance should not be performed on required AC power supply SSCs during a required MODE of operation; planned maintenance should be performed on redundant AC power supply SSCs during MODE 1, 2, or 3 when the RNS is not normally in operation. The basis for this recommendation is that the AC power is more risk important during shutdown MODES, especially when the RCS is open as defined in TRM 3.7.2 Bases, than during other MODES.

TRM 3.8 ELECTRICAL POWER SYSTEMS

TRM 3.8.2 AC Power Supplies – Reactor Coolant System (RCS) Open

TR 3.8.2 The following AC power supplies shall be FUNCTIONAL to support Normal Residual Heat Removal System (RNS) operation:

a. One offsite circuit; and
b. One standby diesel generator.

APPLICABILITY: MODE 5 with RCS pressure boundary open,
MODE 6 with with upper internals in place,
MODE 6 with cavity level < 23 feet above the top of the reactor vessel flange.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One required AC power supply not FUNCTIONAL.	A.1 Initiate actions to increase the water inventory above the core.	12 hours
	AND	
	A.2 Restore required AC power supply to FUNCTIONAL status.	72 hours

TECHNICAL REQUIREMENT SURVEILLANCE

SURVEILLANCE		FREQUENCY
TRS 3.8.2.1	Verify required AC power supplies are FUNCTIONAL.	Within 24 hours prior to entering the Applicability

TRM 3.8.2 AC Power Supplies – Reactor Coolant System (RCS) Open

Bases

AC power is required to power the RNS and its required support systems (CCS & SWS); the RNS provides a nonsafety-related means to normally cool the RCS during shutdown operations. This RNS cooling function is important when the RCS pressure boundary is open and the refueling cavity is not flooded because it reduces the probability of an initiating event due to loss of RNS cooling during these conditions and because it provides margin in the PRA sensitivity performed assuming no credit for nonsafety-related SSCs to mitigate at-power and shutdown events. The RCS is considered open when its pressure boundary is not intact. The margin provided in the PRA study assumes a minimum availability of 90% for this function during the Applicability, considering both maintenance unavailability and failures to operate.

Two AC power supplies, one offsite and one onsite supply, are required as follows:

a) Offsite power through the transmission switchyard and either the main step-up transformer / unit auxiliary transformer or the reserve auxiliary transformer supply from the transmission switchyard, and

b) Onsite power from one of the two standby diesel generators.

FSAR subsection 8.3.1 contains additional information on the standby diesel generators. FSAR Section 8.2 contains information on the offsite AC power supply.

One offsite and one onsite AC power supply are required during the Applicability when the loss of RNS cooling is important. If both of these AC power supplies are not FUNCTIONAL, the plant should not enter these conditions. If the plant has already entered these conditions, then the plant should take action to restore this AC power supply function or to leave these conditions. If the plant has not restored full system operation or left the Applicability within 12 hours, then actions need to be initiated to increase the RCS water level to either 20% pressurizer level or to a refueling cavity ≥ 23 ft.

Planned maintenance should not be performed on required AC power supply SSCs. Planned maintenance affecting the standby diesel generators should be performed in MODE 1, 2, or 3 when the RNS is not normally in operation. Planned maintenance of the other AC power supply should be performed in MODE 2, 3, or 6 with the refueling cavity ≥ 23 ft. The basis for this recommendation is that the AC power is more risk important during shutdown MODES, especially during the Applicability conditions than during other MODES.

TRM 3.8 ELECTRICAL POWER SYSTEMS

TRM 3.8.3 AC Power Supplies – Long Term Shutdown

TR 3.8.3 One ancillary diesel generator shall be FUNCTIONAL.

APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6,
When irradiated fuel assemblies are stored in the spent fuel pool.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Fuel volume in ancillary diesel generator fuel tank ≤ 600 gal.	A.1 Restore fuel volume in ancillary diesel generator fuel tank > 600 gal.	14 days
B. Required ancillary diesel generator not FUNCTIONAL for reasons other than Condition A.	B.1 Restore required ancillary diesel generator to FUNCTIONAL status.	14 days

TECHNICAL REQUIREMENT SURVEILLANCE

SURVEILLANCE		FREQUENCY
TRS 3.8.3.1	Verify fuel volume in ancillary diesel generator fuel tank is > 600 gal.	31 days
TRS 3.8.3.2	Verify required ancillary diesel generator starts and operates for > 1 hour connected to a test load > 35 kw. This test may utilize diesel engine warmup period prior to loading	92 days
TRS 3.8.3.3	Verify required ancillary diesel generator starts and operates for 4 hours while providing power to the regulating transformer, an ancillary main control room fan, the required ancillary I&C room fan and a passive containment cooling water storage tank recirculation pump that it will power in a long term post accident condition. Test loads will be applied to the output of the regulating transformers that represent the loads required for post-accident monitoring and control room lighting. This test may utilize diesel engine warmup prior to loading. Both diesel generators will be operated at the same time during this test.	10 years

TRM 3.8.3 AC Power Supplies – Long Term Shutdown

Bases

The ancillary diesel generators provide long term power supplies for post accident monitoring, MCR and I&C room cooling, MCR lighting, and PCS and spent fuel pool water makeup. For the first 3 days after an accident, the Class 1E batteries provide power for post accident monitoring. Passive heat sinks provide cooling of the MCR and the I&C rooms. The initial water supply in the PCCWST provides for at least 3 days of PCS cooling. The initial water volume in the spent fuel pool, along with required makeup sources, normally provides for at least 3 days of spent fuel cooling; in some shutdown events the PCCWST is used to supplement the spent fuel pool.

After 3 days, ancillary diesel generators can be used to power the MCR and I&C room ancillary fans, two divisions of post accident monitoring, the PCS recirculation pumps, and MCR lighting. In this time frame, the PCCWST provides water makeup to both the PCS and the spent fuel pool. An ancillary diesel generator is required during all MODES of operation, and when irradiated fuel assemblies are stored in the spent fuel pool. This long-term AC power supply function is important because it supports long-term shutdown operation. A minimum availability of 90% is assumed for this function during the Applicability, considering both maintenance unavailability and failures to operate.

The long-term AC power supply function involves the use of two ancillary diesel generators and an ancillary diesel generator fuel tank. Each ancillary diesel generator provides power to one MCR ancillary fan, one I&C room ancillary fan and the associated division of post accident monitoring, one PCS recirculation pump, and a subset of MCR emergency lighting. The specified ancillary diesel generator fuel tank volume is based on operation of both ancillary diesel-generators for 4 days. FSAR subsection 8.3.1 contains additional information on the long-term AC power supply function.

One ancillary diesel generator and the ancillary diesel generator fuel tank are required during all MODES of plant operation, and when irradiated fuel assemblies are stored in the spent fuel pool. Planned maintenance should not be performed on the required ancillary diesel generator during a required MODE of operation; planned maintenance should be performed on the redundant ancillary diesel generator. Planned maintenance affecting the ancillary diesel generator fuel tank that requires less than 72 hours to perform can be performed in any MODE of operation. Planned maintenance requiring more than 72 hours should be performed in MODE 6 with the refueling cavity water level ≥ 23 ft, or when the core has been completely offloaded to the spent fuel pool. Alternate means of makeup to the spent fuel pool should be available for the duration of the maintenance, based on stored decay heat load.

The basis for this recommendation is that in MODE 6, with the refueling cavity water level ≥ 23 ft, core decay heat is low, the risk of core damage is low, and the inventory of the refueling cavity results in slow response of the plant to accidents. When the core has been completely offloaded to the spent fuel pool, the PCCWST and other makeup sources can provide required long-term makeup to the spent fuel pool.

TRM 3.8 ELECTRICAL POWER SYSTEMS

TRM 3.8.4 Non Class 1E DC and UPS System (EDS)

TR 3.8.4 Power for DAS automatic actuation functions required by TR 3.3.1 shall be FUNCTIONAL.

APPLICABILITY: According to Table TR 3.3.1-1 to support required DAS actuation functions.

- NOTE -

EDS support for DAS ATWS mitigation functions of reactor trip and turbine trip actuation are only required in MODE 1.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Power to required DAS Actuation Function not FUNCTIONAL.	A.1 Restore required power supply to FUNCTIONAL status.	14 days

TECHNICAL REQUIREMENT SURVEILLANCE

SURVEILLANCE		FREQUENCY
TRS 3.8.4.1	Verify power supply voltage at each required DAS cabinet is 120 volts ± 5%.	92 days

TRM 3.8.4 Non Class 1E DC and UPS System (EDS)

Bases

The EDS function of providing power to DAS to support ATWS mitigation is important based on 10 CFR 50.62 (ATWS Rule). The EDS function of providing power to DAS to support ESFA is important based on providing margin in the PRA sensitivity performed assuming no credit for nonsafety-related SSCs to mitigate at-power and shutdown events. The margin provided in the PRA study assumes a minimum availability of 90% for this function during the Applicability, considering both maintenance unavailability and failures to operate.

The DAS uses a 2-out-of-2 logic to actuate automatic functions. EDS power is required for the DAS sensors, DAS actuation, and the devices which control the actuated components. Power may be provided by EDS to DAS by non-1E batteries through non-1E inverters. Other means of providing power to DAS include the spare battery through a non-1E inverter or non-1E regulating transformers.

The EDS support of the DAS mitigation functions is required during MODE 1 when ATWS is a limiting event. The EDS support of the DAS ESFA mitigation functions is required during the MODES and other conditions for which DAS ESFA mitigation functions are required as specified in Table TR 3.3.1-1. Planned maintenance should not be performed on a required EDS SSC during a required MODE of operation; planned maintenance should be performed on redundant supplies of EDS power.

TRM 3.9 REFUELING OPERATIONS

TRM 3.9.1 Containment Penetrations

TR 3.9.1 The containment penetrations shall be in the following status:

a. The equipment hatches closed and held in place by four bolts or, if open, the Containment Air Filtration System (VFS) shall be FUNCTIONAL and operating;

b. One door in each air lock closed or, if open, the VFS shall be FUNCTIONAL and operating;

c. The containment spare penetrations closed or, if open, the VFS shall be FUNCTIONAL and operating;

d. Each penetration providing direct access from the containment atmosphere to the outside atmosphere is either:

   1. Closed by a manual or automatic isolation valve, blind flange, or equivalent, or

   2. VFS being FUNCTIONAL and operating.

- NOTE -

Penetration flow path(s) providing direct access from the containment atmosphere to the outside atmosphere may be unisolated under administrative controls.

APPLICABILITY: During movement of irradiated fuel assemblies within containment.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. TR not met.	A.1 Suspend movement of irradiated fuel assemblies within containment.	Immediately

TECHNICAL REQUIREMENT SURVEILLANCE

SURVEILLANCE		FREQUENCY
TRS 3.9.1.1	Verify each required containment penetration is in the required status.	7 days
TRS 3.9.1.2	--- – NOTE – Only required to be met if any TR items a through d has an open penetration. --- Verify the required VFS can maintain a pressure ≤ -0.125 inches water gauge relative to outside atmospheric pressure in the area enclosed by the containment and alternate barrier.	24 months
TRS 3.9.1.3	Operate each required VFS train for ≥ 10 continuous hours with the heaters operating.	Within 31 days prior to fuel movement

TRM 3.9.1 Containment Penetrations

BASES

BACKGROUND

During movement of irradiated fuel assemblies within containment, potential releases of fission product radioactivity within containment are monitored and filtered or are restricted from escaping to the environment when the TR requirements are met. Monitoring of potential releases of radiation is performed in accordance with Technical Specifications (TS) Section 5.5.2, “Radioactive Effluent Control Program.” In MODES 1, 2, 3, and 4, containment OPERABILITY is addressed in TS LCO 3.6.1, “Containment.” In MODES 5 and 6, closure capability of containment penetrations is addressed in TS LCO 3.6.7, “Containment Penetrations.” Since there is no potential for containment pressurization due to a fuel handling accident, the Appendix J leakage criteria and tests are not required in MODES 5 and 6.

The containment serves to contain fission product radioactivity that may be released from the reactor core following an accident, such that offsite radiation exposures are maintained within the requirements of 10 CFR 50.34. For a fuel handling accident, the Reference 1 analysis does not rely on containment closure to meet the offsite radiation exposure limits. This TR is provided as an additional level of defense against the possibility of a fission product release from a fuel handling accident.

The containment equipment hatches, which are part of the containment pressure boundary, provide a means for moving large equipment and components into and out of containment. During movement of irradiated fuel assemblies within containment, an equipment hatch is considered closed if the hatch cover is held in place by at least four bolts. Good engineering practice dictates that the bolts required by this TR be approximately equally spaced.

If an equipment hatch is open, an alternate barrier between the containment atmosphere and the outside atmosphere shall be in place. Each containment equipment hatch opens into a staging area in the auxiliary building. These staging areas contain doors that open to the radiologically controlled areas of the annex building. The annex building contains a door that opens to the outside atmosphere. The alternate barrier may consist of the staging area in the auxiliary building, or may consist of the staging areas in the auxiliary building and the radiologically controlled areas in the annex building provided the doors from the annex building to the outside atmosphere are closed. The alternate barrier may also consist of a temporary equipment hatch cover that provides equivalent isolation capability. The alternate barrier prevents the airborne fission products from being readily released to the atmosphere if the equipment hatches were open during a fuel handling accident.

If an equipment hatch is open during movement of irradiated fuel assemblies within containment, the Containment Air Filtration System (VFS) shall be FUNCTIONAL, and at least one exhaust fan shall be operating to provide for monitoring of air-borne radioactivity. This system services the containment, and upon detection of high radiation, also services the fuel handling area, the auxiliary building (including the staging areas), and the annex building. If high airborne radioactivity is detected in the area enclosed by the alternate barrier, the

BASES (continued)

Radiologically Controlled Area Ventilation System (VAS) supply and exhaust duct isolation dampers automatically close to isolate the affected area from the outside environment, and the VAS exhaust is automatically aligned to the VFS exhaust subsystem. The operation of the VFS exhaust fans provides the system with the ability for monitoring of radioactivity releases from containment following a fuel handling accident and, if operating, will provide filtration of the containment atmosphere.

If a personnel air lock, or containment spare penetration is open during movement of irradiated fuel assemblies within containment, then the VFS shall be FUNCTIONAL and operating to monitor for the release of radioactivity and to provide filtration of the air inside containment. These penetrations open into the auxiliary building. Upon detection of high radiation in the exhaust air from the auxiliary building, VFS will provide filtered exhaust of these areas. Considering that these penetrations open into the auxiliary building and not directly to the atmosphere, and that the VFS is in operation, an alternate barrier to the release of radioactivity directly to the environment is provided.

APPLICABLE SAFETY ANALYSES

There are no safety analyses that require containment closure during movement of irradiated fuel assemblies within containment, other than those discussed in TS LCO 3.6.7. Fuel handling accidents, analyzed in Reference 1, include dropping a single irradiated fuel assembly and handling tool or a heavy object onto other irradiated fuel assemblies. The requirements of TS LCO 3.9.4, “Refueling Cavity Water Level,” ensure that the release of fission product radioactivity, subsequent to a fuel handling accident, results in doses that are well within the guideline values specified in 10 CFR 50.34. Standard Review Plan, Section 15.0.1 (Reference 2), defines the dose acceptance limit to be 25% of the limiting dose guideline values.

This TR is included as defense-in-depth.

TECHNICAL REQUIREMENT

This TR provides defense-in-depth against the consequences of a fuel handling accident in containment by limiting the potential escape paths for fission product radioactivity released within containment. This TR requires that if an equipment hatch, personnel air lock, containment spare penetration, or penetration providing direct access from the containment atmosphere to the outside atmosphere is open during movement of irradiated fuel assemblies within containment, then the VFS shall be FUNCTIONAL and operating to monitor for the release of radioactivity and to provide filtration of the air inside containment.

The VFS is FUNCTIONAL when:

a. One VFS exhaust fan is operating; the associated HEPA filter and charcoal adsorber are not excessively restricting flow, and are capable of performing their filtration function; and air circulation can be maintained, including maintaining $\leq$ -0.125 inches water gauge relative to outside atmospheric pressure;

BASES (continued)

b. An alternate barrier between the containment atmosphere and the outside atmosphere is in place. The alternate barrier may consist of the staging area in the auxiliary building, or may consist of the staging areas in the auxiliary building and the radiologically controlled areas in the annex building provided the doors from the annex building to the outside atmosphere are closed.

Doors in the alternate barrier which are normally closed may be opened for short periods of time for ingress and egress. The alternate barrier may also consist of a temporary equipment hatch cover that provides equivalent isolation capability.

APPLICABILITY

The containment penetration requirements are applicable during movement of irradiated fuel assemblies within containment because this is when there is a potential for a fuel handling accident. In MODES 1, 2, 3, and 4, containment penetration requirements are addressed by TS LCO 3.6.1. In MODES 5 and 6, when movement of irradiated fuel assemblies within containment are not being conducted, the potential for a fuel handling accident does not exist. Containment closure capability in MODES 5 and 6 are addressed by TS LCO 3.6.7.

ACTIONS

The required status for the containment equipment hatch, air locks or spare penetration is either closed, or open with the VFS FUNCTIONAL and operating. The required status for the containment penetrations that provide direct access from the containment atmosphere to the outside atmosphere is either closed by a manual or automatic isolation valve, blind flange or equivalent, or open with the VFS FUNCTIONAL and operating. If the containment equipment hatch or air locks, or any containment penetration that provides direct access from the containment atmosphere to the outside atmosphere is not in the required status, the unit must be placed in a condition where the isolation function is not needed. This is accomplished by immediately suspending movement of irradiated fuel assemblies within containment. Performance of these actions shall not preclude completion of movement of a component to a safe position.

TECHNICAL REQUIREMENT SURVEILLANCE

TRS 3.9.1.1 verifies that each of the containment penetrations required to be in its closed position is in that position or the VFS is FUNCTIONAL and operating. For the VFS to be considered FUNCTIONAL, this surveillance also requires that an alternate barrier is in place.

TRS 3.9.1.2 verifies the ability of the VFS to maintain a pressure ≤ -0.125 inches water gauge relative to outside atmospheric pressure in the containment and the portions of the auxiliary and/or annex building that comprise the envelope defined as the alternate barrier. This surveillance is performed with the VFS in containment operating. Doors in the alternate barrier which are normally closed may be opened for ingress and egress. The portion of the VAS which services the area enclosed by the alternate barrier is aligned to the VFS exhaust subsystem. The portion of the VAS supplying the alternate barrier is secured. The Frequency of 24 months is consistent with the guidance provided in NUREG 0800, Standard Review Plan, Section 6.5.1 (Ref. 3).

Changes to the alternate barrier are permitted while the TR is applicable provided the configuration has been verified to maintain a pressure ≤ -0.125 inches water gauge relative to outside atmospheric pressure within the 24-month frequency. If implementation of a new, untested alternate barrier configuration is required, movement of irradiated fuel must be suspended while the new configuration is established and verified according to this SR.

TRS 3.9.1.3 addresses that the VFS should be checked periodically to ensure that it functions properly. As the operating conditions on this system are not severe, testing each train within 31 days prior to fuel movement provides an adequate check on this system. Operation of the heater dries out any moisture accumulated in the charcoal from humidity in the ambient air.

REFERENCES

1. FSAR Section 15.7.4, “Fuel Handling Accident.”

2. NUREG-0800, Standard Review Plan, Section 15.0.1, Rev. 0.

3. NUREG-0800, Standard Review Plan, Section 6.5.1, Rev. 2, July 1981.

TRM 3.9 REFUELING OPERATIONS

TRM 3.9.2 Containment Air Filtration System (VFS)

TR 3.9.2 One VFS exhaust subsystem shall be FUNCTIONAL.

APPLICABILITY: During movement of irradiated fuel assemblies in the fuel building.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Required VFS exhaust subsystem not FUNCTIONAL.	A.1 Suspend movement of irradiated fuel assemblies in the fuel building.	Immediately

TECHNICAL REQUIREMENT SURVEILLANCE

SURVEILLANCE		FREQUENCY
TRS 3.9.2.1	Operate required VFS exhaust subsystem for ≥ 10 continuous hours with the heaters operating.	Within 31 days prior to fuel movement
TRS 3.9.2.2	Verify the VAS fuel handling area subsystem aligns to required VFS exhaust subsystem on an actual or simulated actuation signal.	24 months
TRS 3.9.2.3	Verify required VFS exhaust subsystem can maintain a pressure ≤ -0.125 inches water gauge relative to outside atmospheric pressure in the fuel handling area.	24 months

TRM 3.9.2 Containment Air Filtration System (VFS)

BASES

BACKGROUND

The radiologically controlled area ventilation system (VAS) serves the fuel handling area of the auxiliary building, and the radiologically controlled portions of the auxiliary and annex buildings, except for the health physics and hot machine shop areas which are provided with a separate ventilation system (VHS). If high airborne radioactivity is detected in the exhaust air from the fuel handling area, the auxiliary building, or the annex buildings, the VAS supply and exhaust duct isolation dampers automatically close to isolate the affected area from the outside environment and the containment air filtration exhaust subsystem starts. The VFS exhaust subsystem prevents exfiltration of unfiltered airborne radioactivity by maintaining the isolated zone at ≤ -0.125 inches water gauge pressure relative to the outside atmosphere. Monitoring of potential releases of radiation is performed in accordance with Technical Specification (TS) 5.5.2, "Radioactive Effluent Control Program."

For a fuel handling accident, the Reference 3 analysis does not rely on the FUNCTIONALITY of the VAS or VFS exhaust subsystem to meet the offsite radiation exposure limits. This TR is provided as an additional level of defense-in-depth against the possibility of a fission product release from a fuel handling accident in the fuel building. The plant vent radiation detectors monitor effluents discharged from the plant vent to the environment.

Each VFS exhaust subsystem includes one 100% capacity exhaust air filtration unit, and the associated exhaust fan, heater and ductwork.

The filtration units are connected to a ducted system with isolation dampers to provide HEPA filtration and charcoal adsorption of exhaust air from the containment, fuel handling area, radiologically controlled areas of the auxiliary and annex buildings. A gaseous radiation monitor is located downstream of the exhaust air filtration units to provide an alarm if abnormal gaseous releases are detected. The plant vent exhaust flow is monitored for gaseous, particulate and iodine releases to the environment. During conditions of abnormal airborne radioactivity in the fuel handling area, auxiliary and/or annex buildings, the VFS exhaust subsystem provides filtered exhaust to minimize unfiltered offsite releases.

The VAS is described in Reference 1 and the VFS is described in Reference 2.

APPLICABLE SAFETY ANALYSES

The VFS is not required to mitigate the consequences of the limiting design basis accident (DBA), which is a fuel handling accident. The analysis of the fuel handling accident, given in Reference 3, assumes that all fuel rods in an assembly are damaged. The DBA analysis of the fuel handling accident does not assume that the VFS provides a filtered exhaust, and its operation would reduce the consequences of the fuel handling accident.

This specification is included for defense-in-depth.

BASES (continued)

TECHNICAL REQUIREMENT

One VFS exhaust subsystem is required to be FUNCTIONAL to reduce the consequences of a fuel handling accident by filtering the fuel building atmosphere.

A VFS exhaust subsystem is considered FUNCTIONAL when its associated:

a. Exhaust fan is capable of operating, including maintaining ≤ -0.125 inches water gauge relative to outside atmospheric pressure;

b. HEPA filter and charcoal adsorber are not excessively restricting flow, and are capable of performing their filtration function;

c. The associated heater and ductwork are capable of operating.

APPLICABILITY

During movement of irradiated fuel in the fuel handling area, one VFS exhaust subsystem is FUNCTIONAL to alleviate the potential consequences of a fuel handling accident.

ACTIONS

When the required VFS exhaust subsystem is not FUNCTIONAL during movement of irradiated fuel assemblies in the fuel building, action must be taken to place the unit in a condition in which the TR does not apply. Action must be taken immediately to suspend movement of irradiated fuel assemblies in the fuel building. This does not preclude the movement of fuel to a safe position.

TECHNICAL REQUIREMENT SURVEILLANCE

TRS 3.9.2.1 verifies the required VFS exhaust subsystem be checked 31 days prior to fuel movement in the fuel handling area to ensure that it functions properly. As the operating conditions on this subsystem are not severe, testing each subsystem within one month prior to fuel movement provides an adequate check on this system. Operation of the heater dries out any moisture accumulated in the charcoal from humidity in the ambient air.

TRS 3.9.2.2 verifies that the VAS fuel handling area subsystem aligns to the VFS and that the required VFS exhaust subsystem starts and operates on an actual or simulated actuation signal. During the post-accident mode of operation, the VAS fuel handling area subsystem aligns to the VFS filtered exhaust subsystem. The 24 month Frequency is consistent with Reference 4.

TRS 3.9.2.3 verifies the integrity of the fuel handling area of the auxiliary building enclosure. The ability of the VAS and VFS to maintain pressure ≤ -0.125 inches water gauge relative to outside atmospheric pressure in the fuel handling area of the auxiliary building is periodically tested to verify proper function of the VAS and VFS exhaust subsystem. During this surveillance, the VAS fuel handling area subsystem is aligned to the operating VFS exhaust subsystem. The fan for the VAS fuel handling area subsystem is off. In this configuration, the

BASES (continued)

required VFS exhaust subsystem is designed to maintain a pressure in the fuel handling area of the auxiliary building ≤ -0.125 inches water gauge relative to outside atmospheric pressure, to prevent unfiltered and unmonitored leakage. Doors may be opened for short periods of time to allow ingress and egress. During this surveillance, the VAS may be servicing the remaining portions of the auxiliary and annex buildings. The Frequency of 24 months is consistent with the guidance provided in NUREG 0800, Standard Review Plan, Section 6.5.1 (Ref. 5).

REFERENCES

1. FSAR Section 9.4.3, “Radiologically Controlled Area Ventilation System.”

2. FSAR Section 9.4.7, “Containment Air Filtration System.”

3. FSAR Section 15.7.4, “Fuel Handling Accident.”

4. Regulatory Guide 1.140 (Rev. 2).

5. NUREG 0800, Standard Review Plan, Section 6.5.1, Rev. 2, July 1981.