1.3 Completion Times

~~EXAMPLES (continued)~~

~~EXAMPLE 1.3-3~~

~~ACTIONS~~

~~CONDITION~~	~~REQUIRED ACTION~~	~~COMPLETION TIME~~
~~A. One Function X train inoperable.~~	~~A.1 Restore Function X train to OPERABLE status.~~	~~7 days~~
~~B. One Function Y train inoperable.~~	~~B.1 Restore Function Y train to OPERABLE status.~~	~~72 hours~~
~~C. One Function X train inoperable.~~	~~C.1 Restore Function X train to OPERABLE status.~~	~~72 hours~~
~~AND~~	~~OR~~	
~~One Function Y train inoperable.~~	~~C.2 Restore Function Y train to OPERABLE status.~~	~~72 hours~~

1.3 Completion Times

~~EXAMPLES (continued)~~

~~When one Function X train and one Function Y train are inoperable, Condition A and Condition B are concurrently applicable. The Completion Times for Condition A and Condition B are tracked separately for each train starting from the time each train was declared inoperable and the Condition was entered. A separate Completion Time is established for Condition C and tracked from the time the second train was declared inoperable (i.e., the time the situation described in Condition C was discovered).~~

~~If Required Action C.2 is completed within the specified Completion Time, Conditions B and C are exited. If the Completion Time for Required Action A.1 has not expired, operation may continue in accordance with Condition A. The remaining Completion Time in Condition A is measured from the time the affected train was declared inoperable (i.e., initial entry into Condition A).~~

~~It is possible to alternate between Conditions A, B, and C in such a manner that operation could continue indefinitely without ever restoring systems to meet the LCO. However, doing so would be inconsistent with the basis of the Completion Times. Therefore, there shall be administrative controls to limit the maximum time allowed for any combination of Conditions that result in a single contiguous occurrence of failing to meet the LCO. These administrative controls shall ensure that the completion times for those conditions are not inappropriately extended.~~

1.3 Completion Times

~~EXAMPLES (continued)~~

~~EXAMPLE 1.3-4~~

~~ACTIONS~~

~~CONDITION~~	~~REQUIRED ACTION~~	~~COMPLETION TIME~~
~~A. One or more valves inoperable.~~	~~A.1 Restore valve(s) to OPERABLE status.~~	~~4 hours~~
~~B. Required Action and associated Completion Time not met.~~	~~B.1 Be in MODE 3.~~ ~~AND~~ ~~B.2 Be in MODE 4.~~	~~6 hours~~ ~~12 hours~~

~~A single Completion Time is used for any number of valves inoperable at the same time. The Completion Time associated with Condition A is based on the initial entry into Condition A and is not tracked on a per valve basis. Declaring subsequent valves inoperable, while Condition A is still in effect, does not trigger the tracking of separate Completion Times.~~

~~Once one of the valves has been restored to OPERABLE status, the Condition A Completion Time is not reset, but continues from the time the first valve was declared inoperable. The Completion Time may be extended if the valve restored to OPERABLE status was the first inoperable valve. The Condition A Completion Time may be extended for up to 4 hours provided this does not result in any subsequent valve being inoperable for > 4 hours.~~

~~If the Completion Time of 4 hours (plus the extension) expires while one or more valves are still inoperable, Condition B is entered.~~

1.3 Completion Times

~~EXAMPLES (continued)~~

~~EXAMPLE 1.3-5~~

~~ACTIONS~~

~~----------NOTE----------~~
~~Separate Condition entry is allowed for each inoperable valve.~~
~~----------~~

~~CONDITION~~	~~REQUIRED ACTION~~	~~COMPLETION TIME~~
~~A. One or more valves inoperable.~~	~~A.1 Restore valve to OPERABLE status.~~	~~4 hours~~
~~B. Required Action and associated Completion Time not met.~~	~~B.1 Be in MODE 3.~~ ~~AND~~ ~~B.2 Be in MODE 4.~~	~~6 hours~~ ~~12 hours~~

~~The Note above the ACTIONS Table is a method of modifying how the Completion Time is tracked. If this method of modifying how the Completion Time is tracked was applicable only to a specific Condition, the Note would appear in that Condition rather than at the top of the ACTIONS Table.~~

~~The Note allows Condition A to be entered separately for each inoperable valve, and Completion Times tracked on a per valve basis. When a valve is declared inoperable, Condition A is entered and its Completion Time starts. If subsequent valves are declared inoperable, Condition A is entered for each valve and separate Completion Times start and are tracked for each valve.~~

1.3 Completion Times

~~EXAMPLES (continued)~~

If ~~the Completion Time associated with a valve in Condition A expires, Condition B is entered for that valve. If the Completion Times associated with subsequent valves in Condition A expire, Condition B is entered separately for each valve and separate Completion Times start and are tracked for each valve. If a valve that caused entry into Condition B is restored to OPERABLE status, Condition B is exited for that valve.~~

~~Since the Note in this example allows multiple Condition entry and tracking of separate Completion Times, Completion Time extensions do not apply.~~

~~EXAMPLE 1.3-6~~

~~ACTIONS~~

~~CONDITION~~	~~REQUIRED ACTION~~	~~COMPLETION TIME~~
~~A. One channel inoperable.~~	~~A.1 Perform SR 3.x.x.x.~~	~~Once per 8 hours~~
	~~OR~~	
	~~A.2 Reduce THERMAL POWER to ≤ 50% RTP.~~	~~8 hours~~
~~B. Required Action and associated Completion Time not met.~~	~~B.1 Be in MODE 3.~~	~~6 hours~~

1.3 Completion Times

~~EXAMPLES (continued)~~

~~Entry into Condition A offers a choice between Required Action A.1 or A.2. Required Action A.1 has a "once per" Completion Time, which qualifies for the 25% extension, per SR 3.0.2, to each performance after the initial performance. The initial 8 hour interval of Required Action A.1 begins when Condition A is entered and the initial performance of Required Action A.1 must be complete within the first 8 hour interval. If Required Action A.1 is followed, and the Required Action is not met within the Completion Time (plus the extension allowed by SR 3.0.2), Condition B is entered. If Required Action A.2 is followed and the Completion Time of 8 hours is not met, Condition B is entered.~~

~~If after entry into Condition B, Required Action A.1 or A.2 is met, Condition B is exited and operation may then continue in Condition A.~~

1.3 Completion Times

~~EXAMPLES (continued)~~

~~EXAMPLE 1.3-7~~

~~ACTIONS~~

~~CONDITION~~	~~REQUIRED ACTION~~	~~COMPLETION TIME~~
~~A. One subsystem inoperable.~~	~~A.1 Verify affected subsystem isolated.~~	~~1 hour~~ ~~AND~~ ~~Once per 8 hours thereafter~~
	~~AND~~	
	~~A.2 Restore subsystem to OPERABLE status.~~	~~72 hours~~
~~B. Required Action and associated Completion Time not met.~~	~~B.1 Be in MODE 3.~~	~~6 hours~~
	~~AND~~	
	~~B.2 Be in MODE 5.~~	~~36 hours~~

~~Required Action A.1 has two Completion Times. The 1 hour Completion Time begins at the time the Condition is entered and each "Once per 8 hours thereafter" interval begins upon performance of Required Action A.1.~~

1.3 Completion Times

~~EXAMPLES (continued)~~

~~If after Condition A is entered, Required Action A.1 is not met within either the initial 1 hour or any subsequent 8 hour interval from the previous performance (plus the extension allowed by SR 3.0.2), Condition B is entered. The Completion Time clock for Condition A does not stop after Condition B is entered, but continues from the time Condition A was initially entered. If Required Action A.1 is met after Condition B is entered, Condition B is exited and operation may continue in accordance with Condition A, provided the Completion Time for Required Action A.2 has not expired.~~

~~Example 1.3-8~~

~~ACTIONS~~

~~CONDITION~~	~~REQUIRED ACTION~~	~~COMPLETION TIME~~
~~A. One subsystem inoperable.~~	~~A.1 Restore subsystem to OPERABLE status.~~	~~7 days~~ ~~OR~~ ~~In accordance with the Risk Informed Completion Program~~
~~B. Required Action and associated Completion Time not met.~~	~~B.1 Be in MODE 3.~~ ~~AND~~ ~~B.2 Be in MODE 5.~~	~~6 hours~~ ~~36 hours~~

1.3 Completion Times

~~EXAMPLES (continued)~~

~~When a subsystem is declared inoperable, Condition A is entered. The 7 day Completion Time may be applied as discussed in Example 1.3-2. However, the licensee may elect to apply the Risk Informed Completion Time Program which permits calculation of a Risk Informed Completion Time (RICT) that may be used to completion the Required Action beyond the 7 day Completion Time. The RICT cannot exceed 30 days. After the 7 day Completion Time has expired, the subsystem must be restored to OPERABLE status within the RICT or Condition B must also be entered.~~

~~The Risk Informed Completion Time Program requires recalculation of the RICT to reflect changing plant conditions. For planned changes, the revised RICT must be determined prior to implementation of the change in configuration. For emergent conditions, the revised RICT must be determined within the time limits of the Required Action Completion Time (i.e., not the RICT or 12 hours after the plant configuration change, whichever is less.~~

~~If the 7 day Completion Time clock of Condition A has expired and subsequent changes in plant condition result in exiting the applicability of the Risk Informed Completion Time Program without restoring the inoperable subsystem to OPERABLE status, Condition B is also entered and the Completion Time clocks for Required Actions B.1 and B.2 start.~~

~~If the RICT expires or is recalculated to be less than the elapsed time since the Condition was entered and the inoperable subsystem has not been restored to OPERABLE status, Condition B is also entered and the Completion Time clocks for Required Actions B.1 and B.2 start. If the inoperable subsystems are restored to OPERABLE status after Condition B is entered, Conditions A is exited, and therefore, the Required Actions of Conditions B may be terminated.~~

IMMEDIATE COMPLETION TIME	When "Immediately" is used as a Completion Time, the Required Action should be pursued without delay and in a controlled manner.

1.0 USE AND APPLICATION

1.4 Frequency

PURPOSE	The purpose of this section is to define the proper use and application of Frequency requirements.

DESCRIPTION

Each Surveillance Requirement (SR) has a specified Frequency in which the Surveillance must be met in order to meet the associated Limiting Condition for Operation (LCO). An understanding of the correct application of the specified Frequency is necessary for compliance with the SR.

The "specified Frequency" is referred to throughout this section and each of the Specifications of Section 3.0, Surveillance Requirement (SR) Applicability. The "specified Frequency" consists of the requirements of the Frequency column of each SR ~~as well as certain Notes in the Surveillance column that modify performance requirements~~.

~~Situations where a Surveillance could be required (i.e., its Frequency could expire), but where it is not possible or not desired that it be performed until sometime after the associated LCO is within its Applicability, represent potential SR 3.0.4 conflicts. To avoid these conflicts, the SR (i.e., the Surveillance or the Frequency) is stated such that it is only "required" when it can be and should be performed. With an SR satisfied, SR 3.0.4 imposes no restriction.~~

~~Sometimes special situations dictate when the requirements of a Surveillance are to be met. They are "otherwise stated" conditions allowed by SR 3.0.1. They may be stated as clarifying Notes in the Surveillance, as part of the Surveillance, or both. Example 1.4-5 discusses these special situations.~~

1.4 Frequency

DESCRIPTION (continued)

The use of "met" or "performed" ~~in these instances~~ conveys specific meaning. A surveillance is "met" only when the acceptance criteria are satisfied. Known failure of the requirements of a Surveillance, even without a Surveillance specifically being "performed," constitutes a Surveillance not "met." "Performance" refers only to the requirement to specifically determine the ability to meet the acceptance criteria. ~~SR 3.0.4 restrictions would not apply if both the following conditions are satisfied:~~

~~a. The Surveillance is not required to be performed; and~~

~~b. The Surveillance is not required to be met or, even if required to be met, is not known to be failed.~~

EXAMPLE~~S~~

The following example~~s illustrate the various ways that Frequencies are specified. In these examples, the Applicability of the LCO (LCO not shown) is MODES 1, 2, and 3. The examples do not reflect the potential application of LCO 3.0.4.b.~~

illustrates the type of Frequency statements that appears in the Technical Specifications (TS).

1.4 Frequency

EXAMPLE~~S~~ (continued)

EXAMPLE 1.4-1

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
~~Perform CHANNEL CHECK.~~ Verify...	12 hours

Example 1.4-1 contains the type of SR ~~most often~~ encountered in the Technical Specifications (TS). The Frequency specifies an interval (12 hours) during which the associated Surveillance must be performed at least one time. Performance of the Surveillance initiates the subsequent interval. Although the Frequency is stated as 12 hours, an extension of the time interval to 1.25 times the stated Frequency is allowed by SR 3.0.2 for ~~operational~~ flexibility. The measurement of this interval continues at all times, even when the SR is not required to be met per SR 3.0.1 (such as when ~~the equipment is inoperable,~~ a variable is outside specified limits, or the ~~unit~~ facility is outside the Applicability of the LCO). If the interval specified by SR 3.0.2 is exceeded while the ~~unit~~ facility is in a ~~MODE or other~~ specified condition in the Applicability of the LCO~~, and the performance of the Surveillance is not otherwise modified (refer to Example 1.4-3)~~, then SR 3.0.3 becomes applicable.

If the interval as specified by SR 3.0.2 is exceeded while the ~~unit~~ facility is not in a ~~MODE or other~~ specified condition in the Applicability of the LCO for which performance of the SR is required, the Surveillance must be performed within the Frequency requirements of SR 3.0.2 prior to entry into the ~~MODE or other~~ specified condition. ~~Failure to do so would result in a violation of SR 3.0.4.~~

1.4 Frequency

~~EXAMPLES (continued)~~

~~EXAMPLE 1.4-2~~

~~SURVEILLANCE REQUIREMENTS~~

~~SURVEILLANCE~~	~~FREQUENCY~~
~~Verify flow is within limits.~~	~~Once within 12 hours after ≥ 25% RTP~~ ~~AND~~ ~~24 hours thereafter~~

~~Example 1.4-2 has two Frequencies. The first is a one-time performance Frequency, and the second is of the type shown in Example 1.4-1. The logical connector "AND" indicates that both Frequency requirements must be met. Each time reactor power is increased from a power level < 25% RTP to ≥ 25% RTP, the Surveillance must be performed within 12 hours.~~

~~The use of "once" indicates a single performance will satisfy the specified Frequency (assuming no other Frequencies are connected by "AND"). This type of Frequency does not qualify for the extension allowed by SR 3.0.2.~~

~~"Thereafter" indicates future performances must be established per SR 3.0.2, but only after a specified condition is first met (i.e., the "once" performance in this example). If reactor power decreases to < 25% RTP, the measurement of both intervals stops. New intervals start upon reactor power reaching 25% RTP.~~

1.4 Frequency

~~EXAMPLES (continued)~~

~~EXAMPLE 1.4-3~~

~~SURVEILLANCE REQUIREMENTS~~

~~SURVEILLANCE~~	~~FREQUENCY~~
~~NOTE~~ ~~Not required to be performed until 12 hours after ≥ 25% RTP.~~	
~~Perform channel adjustment.~~	~~7 days~~

~~The interval continues, whether or not the unit operation is < 25% RTP between performances.~~

~~As the Note modifies the required performance of the Surveillance, it is construed to be part of the "specified Frequency." Should the 7 day interval be exceeded while operation is < 25% RTP, this Note allows 12 hours after power reaches ≥ 25% RTP to perform the Surveillance. The Surveillance is still considered to be performed within the "specified Frequency." Therefore, if the Surveillance were not performed within the 7 day (plus the extension allowed by SR 3.0.2) interval, but operation was < 25% RTP, it would not constitute a failure of the SR or failure to meet the LCO. Also, no violation of SR 3.0.4 occurs when changing MODES, even with the 7 day Frequency not met, provided operation does not exceed 12 hours with power ≥ 25% RTP.~~

~~Once the unit reaches 25% RTP, 12 hours would be allowed for completing the Surveillance. If the Surveillance were not performed within this 12 hour interval, there would then be a failure to perform a Surveillance within the specified Frequency, and the provisions of SR 3.0.3 would apply.~~

1.4 Frequency

~~EXAMPLES (continued)~~

~~EXAMPLE 1.4-4~~

~~SURVEILLANCE REQUIREMENTS~~

~~SURVEILLANCE~~	~~FREQUENCY~~
~~NOTE~~ ~~Only required to be performed in MODE 1.~~	
~~Perform complete cycle of the valve.~~	~~7 days~~

~~The interval continues, whether or not the unit operation is in MODE 1, 2, or 3 (the assumed Applicability of the associated LCO) between performances.~~

~~As the Note modifies the required performance of the Surveillance, the note is construed to be part of the "specified Frequency." Should the 7 day interval be exceeded while operation is not in MODE 1, this Note allows entry into and operation in MODES 2 and 3 to perform the Surveillance. The Surveillance is still considered to be performed within the "specified Frequency" if completed prior to MODE 1. Therefore, if the Surveillance were not performed within the 7 day (plus the extension allowed by SR 3.0.2) interval, but operation was not in MODE 1, it would not constitute a failure of the SR or failure to meet the LCO. Also, no violation of SR 3.0.4 occurs when changing MODES, even with the 7 day Frequency not met, provided operation does not result in entry into MODE 1.~~

~~Once the unit reaches MODE 1, the requirement for the Surveillance to be performed within its specified Frequency applies and would require that the Surveillance had been performed. If the Surveillance were not performed prior to MODE 1, there would then be a failure to perform a Surveillance within the specified Frequency, and the provisions of SR 3.0.3 would apply.~~

1.4 Frequency

~~EXAMPLES (continued)~~

~~EXAMPLE 1.4-5~~

~~SURVEILLANCE REQUIREMENTS~~

~~SURVEILLANCE~~	~~FREQUENCY~~
~~NOTE~~ ~~Only required to be met in MODE 1.~~	
~~Verify leakage rates are within limits.~~	~~24 hours~~

~~Example 1.4-5 specifies that the requirements of this Surveillance do not have to be met until the unit is in MODE 1. The interval measurement for the Frequency of this Surveillance continues at all times, as described in Example 1.4-1. However, the Note constitutes an "otherwise stated" exception to the Applicability of this Surveillance. Therefore, if the Surveillance were not performed within the 24 hour interval (plus the extension allowed by SR 3.0.2), but the unit was not in MODE 1, there would be no failure of the SR nor failure to meet the LCO. Therefore, no violation of SR 3.0.4 occurs when changing MODES, even with the 24 hour Frequency exceeded, provided the MODE change was not made into MODE 1. Prior to entering MODE 1 (assuming again that the 24 hour Frequency were not met), SR 3.0.4 would require satisfying the SR.~~

3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY

LCO 3.0.1 LCOs shall be met during the ~~MODES or other~~ specified conditions in the Applicability, except as provided in LCO 3.0.2~~, LCO 3.0.7, and LCO 3.0.9~~.

LCO 3.0.2 Upon discovery of a failure to meet an LCO, the Required Actions of the associated Conditions shall be met~~, except as provided in LCO 3.0.5 and LCO 3.0.6~~.

~~If the LCO 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.~~

LCO 3.0.3 ~~When an LCO is not met and the associated ACTIONS are not met, an associated ACTION is not provided, or if directed by the associated ACTIONS, the unit shall be placed in a MODE or other specified condition in which the LCO is not applicable. Action shall be initiated within 1 hour to place the unit, as applicable, in:~~

DELETED

~~a. MODE 3 within 7 hours;~~

~~b. MODE 4 within 13 hours; and~~

~~c. MODE 5 within 37 hours.~~

~~Exceptions to this Specification are stated in the individual Specifications.~~

~~Where corrective measures are completed that permit operation in accordance with the LCO or ACTIONS, completion of the actions required by LCO 3.0.3 is not required.~~

~~LCO 3.0.3 is only applicable in MODES 1, 2, 3, and 4.~~

3.0 LCO Applicability

LCO 3.0.4

DELETED

~~When an LCO is not met, entry into a MODE or other specified condition in the Applicability shall only be made:~~

~~a. When the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time;~~

~~b. After performance of a risk assessment addressing inoperable systems and components, consideration of the results, determination of the acceptability of entering the MODE or other specified condition in the Applicability, and establishment of risk management actions, if appropriate (exceptions to this Specification are stated in the individual Specifications); or~~

~~c. When an allowance is stated in the individual value, parameter, or other Specification.~~

~~This Specification shall not prevent changes in MODES or other specified conditions in the Applicability that are required to comply with ACTIONS or that are part of a shutdown of the unit.~~

LCO 3.0.5

DELETED

~~Equipment removed from service or declared inoperable to comply with ACTIONS may be returned to service under administrative control solely to perform testing required to demonstrate its OPERABILITY or the OPERABILITY of other equipment. This is an exception to LCO 3.0.2 for the system returned to service under administrative control to perform the required testing to demonstrate OPERABILITY.~~

3.0 LCO Applicability

LCO 3.0.6

DELETED

~~When a supported system LCO is not met solely due to a support system LCO not being met, the Conditions and Required Actions associated with this supported system are not required to be entered. Only the support system LCO ACTIONS are required to be entered. This is an exception to LCO 3.0.2 for the supported system. In this event, an evaluation shall be performed in accordance with Specification 5.5.15, "Safety Function Determination Program (SFDP)." If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered.~~

~~When a support system's Required Action directs a supported system to be declared inoperable or directs entry into Conditions and Required Actions for a supported system, the applicable Conditions and Required Actions shall be entered in accordance with LCO 3.0.2.~~

3.0 LCO Applicability

LCO 3.0.7

DELETED

~~Exception LCOs allow specified Technical Specification (TS) requirements to be changed to permit performance of special tests and operations. Unless otherwise specified, all other TS requirements remain unchanged. Compliance with Exception LCOs is optional. When an Exception LCO is desired to be met but is not met, the ACTIONS of the Exception LCO shall be met. When an Exception LCO is not desired to be met, entry into a MODE or other specified condition in the Applicability shall be made in accordance with the other applicable Specifications.~~

LCO 3.0.8

DELETED

~~LCOs, including associated ACTIONs, shall apply to each unit individually, unless otherwise indicated. Whenever the LCO refers to a system or component that is shared by both units, the ACTIONs will apply to both units simultaneously.~~

LCO 3.0.9

DELETED

~~When one or more required snubbers are unable to perform their associated support function(s), any affected supported LCO(s) are not required to be declared not met solely for this reason if risk is assessed and managed, and:~~

~~a. the snubbers not able to perform their associated support function(s) are associated with only one train or subsystem of a multiple train or subsystem supported system or are associated with a single train or subsystem supported system and are able to perform their associated support function within 72 hours; or~~

~~b. the snubbers not able to perform their associated support function(s) are associated with more than one train or subsystem of a multiple train or subsystem supported system and are able to perform their associated support function within 12 hours.~~

~~At the end of the specified period the required snubbers must be able to perform their associated support function(s), or the affected supported system LCO(s) shall be declared not met.~~

3.0 SURVEILLANCE REQUIREMENT (SR) APPLICABILITY

SR 3.0.1 SRs shall be met during the ~~MODES or other~~ specified conditions in the Applicability for individual LCOs, unless otherwise stated in the SR. Failure to meet a Surveillance, whether such failure is experienced during the performance of the Surveillance or between performances of the Surveillance, shall be failure to meet the LCO. Failure to perform a Surveillance within the specified Frequency shall be failure to meet the LCO except as provided in SR 3.0.3. Surveillances do not have to be performed on ~~inoperable equipment or~~ variables outside specified limits.

SR 3.0.2 The specified Frequency for each SR is met if the Surveillance 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 Specification are stated in the individual Specifications.~~

3.0 SR APPLICABILITY

SR 3.0.3 If it is discovered that a Surveillance was not performed within its specified Frequency, then compliance with the requirement to declare the LCO not met may be delayed, from the time of discovery, up to 24 hours or up to the limit of the specified Frequency, whichever is greater. This delay period is permitted to allow performance of the Surveillance. The delay period is only applicable when there is a reasonable expectation the surveillance will be met when performed. A risk evaluation shall be performed for any Surveillance delayed greater than 24 hours and the risk impact shall be managed.

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

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

SR 3.0.4 Entry into a ~~MODE or other~~ specified condition in the Applicability of an LCO shall only be made when the LCO's Surveillances have been met within their specified Frequency, except as provided by SR 3.0.3. ~~When an LCO is not met due to Surveillances not having been met, entry into a MODE or other specified condition in the Applicability shall only be made in accordance with LCO 3.0.4.~~

~~This provision shall not prevent entry into MODES or other specified conditions in the Applicability that are required to comply with ACTIONS or that are part of a shutdown of the unit.~~

SR 3.0.5 ~~SRs shall apply to each unit individually, unless otherwise indicated.~~

DELETED

FACILITY

3.7 ~~PLANT~~ SYSTEMS

3.7.14 Spent Fuel Pool Water Level

LCO 3.7.14 The spent fuel pool water level shall be ≥ 23 ft over the top of irradiated fuel assemblies seated in the storage racks.

APPLICABILITY: During movement of irradiated fuel assemblies in the spent fuel pool.

ACTIONS

~~NOTE~~
~~LCO 3.0.3 is not applicable.~~

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Spent fuel pool water level not within limit.	A.1 Suspend movement of irradiated fuel assemblies in the spent fuel pool.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.14.1	Verify the spent fuel pool water level is ≥ 23 ft above the top of the irradiated fuel assemblies seated in the storage racks.	In accordance with the Surveillance Frequency Control Program

FACILITY

3.7 ~~PLANT~~ SYSTEMS

3.7.15 Spent Fuel Pool Boron Concentration

LCO 3.7.15 The spent fuel pool boron concentration shall be ≥ 300 ppm.

APPLICABILITY: Whenever fuel assemblies are stored in the spent fuel pool.

ACTIONS

~~NOTE~~
~~LCO 3.0.3 is not applicable.~~

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Spent fuel pool boron concentration not within limit.	A.1 Suspend movement of fuel assemblies in the spent fuel pool.	Immediately
	AND	
	A.2 Initiate action to restore spent fuel pool boron concentration to within limit.	Immediately

NO CHANGES ON THIS PAGE

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.15.1	Verify the spent fuel pool boron concentration is within limit.	In accordance with the Surveillance Frequency Control Program

FACILITY

3.7 ~~PLANT~~ SYSTEMS

3.7.16 Spent Fuel Assembly Storage

LCO 3.7.16 Each spent fuel assembly stored in the spent fuel pool shall, as applicable:

a. Region 1 of spent fuel pool storage racks

Have an initial nominal enrichment of ≤ 5.0 weight percent U-235 to permit storage in any cell location.

b. Region 2 of spent fuel pool storage racks

Have a combination of initial enrichment and burnup within the Acceptable Burnup Domain of Figure 3.7.16-1.

APPLICABILITY: Whenever fuel assemblies are stored in the spent fuel pool.

ACTIONS

~~NOTE~~
~~LCO 3.0.3 is not applicable.~~

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Requirements of the LCO not met.	A.1 Initiate action to move the noncomplying fuel assembly into a location which restores compliance.	Immediately

NO CHANGES ON THIS PAGE

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.16.1	Verify by administrative means the initial nominal enrichment of the fuel assembly is ≤ 5.0 weight percent U-235.	Prior to storing the fuel assembly in Region 1
SR 3.7.16.2	Verify by administrative means the combination of initial enrichment and burnup, as applicable, of the fuel assembly is within the Acceptable Burnup Domain of Figure 3.7.16-1.	Prior to storing the fuel assembly in Region 2

NO CHANGES ON THIS PAGE

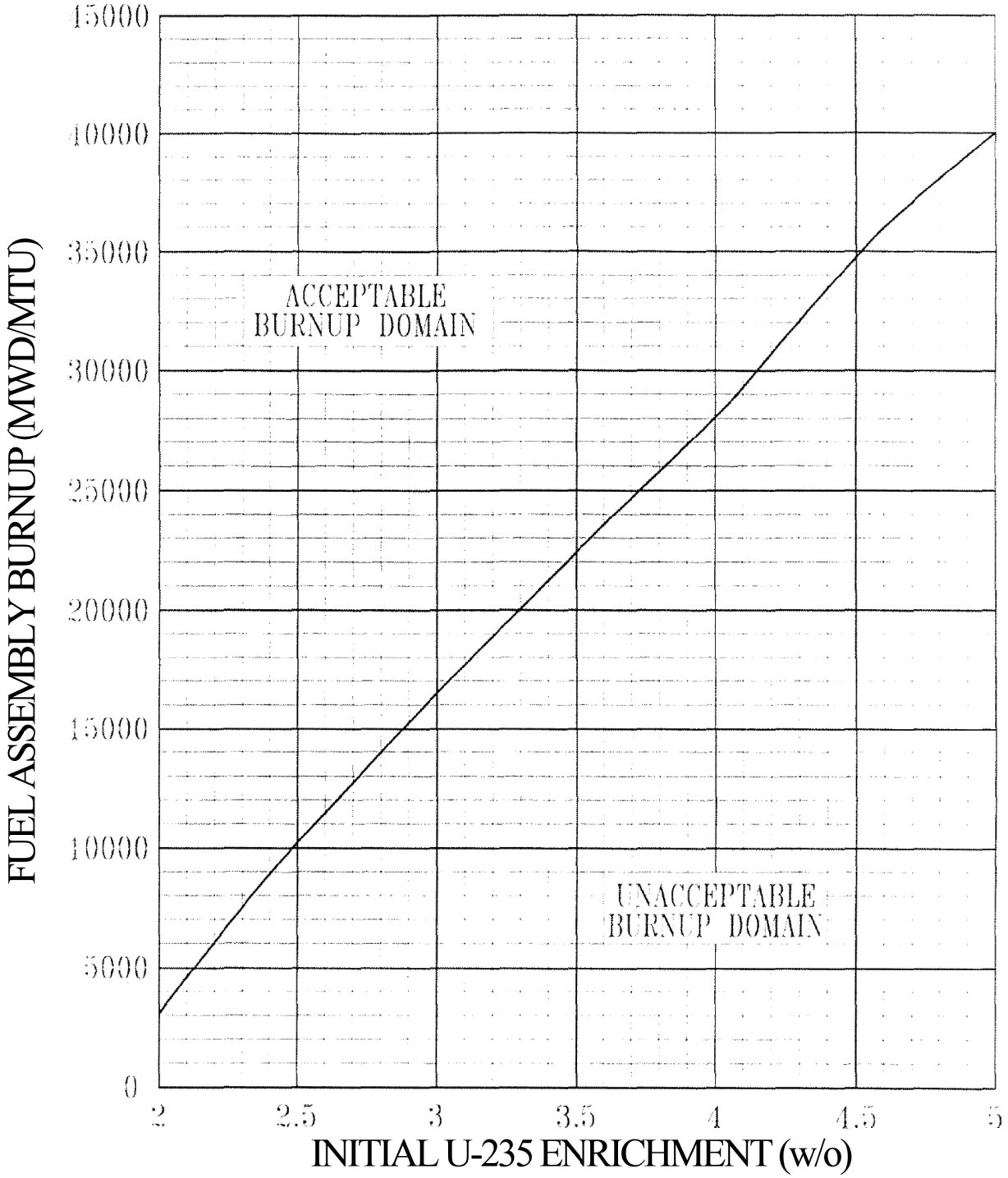

Figure 3.7.16-1 (page 1 of 1)
Region 2 Fuel Assembly Burnup Requirements

4.0 DESIGN FEATURES

4.1 Site

4.1.1 Site Location

The site is located in Rockvale Township, approximately 3.73 mi (6 km) south-southwest of the city of Byron in northern Illinois.

4.1.2 ~~Exclusion Area Boundary (EAB)~~ Deleted

~~The EAB shall not be less than 1460 ft (445 meters) from the outer containment wall.~~

4.1.3 ~~Low Population Zone (LPZ)~~ Deleted

~~The LPZ shall be a 3.0 mi (4828 meter) radius measured from the midpoint between the two reactors.~~

4.2 ~~Reactor Core~~ Deleted

~~4.2.1 Fuel Assemblies~~

~~The reactor shall contain 193 fuel assemblies. Each assembly shall consist of a matrix of Zircaloy, ZIRLO®, or Optimized ZIRLO™ clad fuel rods with an initial composition of natural or slightly enriched uranium dioxide (UO_2) as fuel material. Limited substitutions of zirconium alloy or stainless steel filler rods or vacancies for fuel rods, in accordance with approved applications of fuel rod configurations, may be used. Fuel assemblies shall be limited to those fuel designs that have been analyzed with applicable NRC staff approved codes and methods and shown by tests or analyses to comply with all fuel safety design bases. A limited number of lead test assemblies (LTAs) that have not completed representative testing may be placed in nonlimiting core regions.~~

~~During Unit 2 Cycles 22, 23, and 24, two LTAs containing up to twenty total lead test rods may be placed in the reactor for evaluation. The LTA rods containing uranium silicide fuel pellets and rods containing standard UO_2 fuel pellets with coated cladding shall be nonlimiting. The LTA rods containing ADOPT™ fuel pellets may be loaded in core regions which are nonlimiting under steady state reactor conditions and shall comply with fuel limits specified in the COLR and Technical Specifications under all operational conditions.~~

4.0 DESIGN FEATURES

~~4.2 Reactor Core (continued)~~

~~4.2.2 Control Rod Assemblies~~

~~The reactor core shall contain 53 control rod assemblies. The control material shall be silver indium cadmium, hafnium, or a mixture of both types.~~

4.3 Fuel Storage

4.3.1 Criticality

The spent fuel storage racks are designed and shall be maintained, as applicable, with:

a. Fuel assemblies having a maximum U-235 enrichment of 5.0 weight percent;

b. A $k_{eff} \leq 0.95$ if fully flooded with unborated water, which includes an allowance for uncertainties as described in Holtec International Report HI-982094, "Criticality Analysis for Byron/Braidwood Rack Installation Project," Project No. 80944, 1998;

c. A nominal 10.888 inch north-south and 10.574 inch east-west center to center distance between fuel assemblies placed in Region 1 racks; and

d. A nominal 8.97 inch center to center distance between fuel assemblies placed in Region 2 racks.

4.3.2 Drainage

The spent fuel pool is designed and shall be maintained to prevent inadvertent draining of the pool below elevation 410 ft, 0 inches.

4.3.3 Capacity

The spent fuel pool is designed and shall be maintained with a storage capacity limited to no more than 2984 fuel assemblies.

TS Markups unchanged from Attachment 2 of Byron Administrative Controls LAR submitted on September 24, 2020 (ML20269A401)

5.0 ADMINISTRATIVE CONTROLS

5.1 Responsibility

plant

shift

5.1.1 The ~~station~~ manager shall be responsible for overall facility operation and shall delegate in writing the succession to this responsibility during his absence.

shift manager

5.1.2 A ~~Senior Reactor Operator (SRO)~~ shall be responsible for the ~~control room~~ command function ~~while either unit is in MODE 1, 2, 3, or 4. For each unit, an SRO may be designated as responsible for the control room command function. While both units are in MODE 5 or 6, or defueled, an individual with an active SRO license or Reactor Operator license shall be designated to assume the control room command function~~.

TS Markups unchanged from Attachment 2 of Byron Administrative Controls LAR submitted on September 24, 2020 (ML20269A401)

5.0 ADMINISTRATIVE CONTROLS

5.2 Organization

5.2.1 Onsite and Offsite Organizations

Onsite and offsite organizations shall be established for facility ~~operation~~ and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting ~~safety of the nuclear power plant.~~

the safe storage and handling of irradiated fuel.

staff

a. Lines of authority, responsibility, and communication shall be defined and established throughout highest management levels, intermediate levels, and all ~~operating~~ organization positions. These relationships shall be documented and updated, as appropriate, in organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements, including the generic titles of those personnel fulfilling the responsibilities of the positions delineated in these Technical Specifications, shall be documented in the Quality Assurance Program;

facility

Exelon Decommissioning

b. The ~~station~~ manager shall be responsible for overall safe operation of the ~~plant~~ and shall have control over those onsite activities necessary for safe ~~operation~~ and ~~maintenance~~ of ~~the plant;~~

plant

storage

handling

irradiated fuel

have corporate responsibility

A responsible officer

c. ~~The Chief Nuclear Officer~~ shall ~~be responsible~~ for ~~overall plant nuclear safety~~ and shall take any measures needed to ensure acceptable performance of the staff in ~~operating,~~ maintaining~~,~~ and providing technical support to the ~~plant~~ to ensure ~~nuclear safety~~; and

the safe storage and handling of irradiated fuel

facility

safe storage and handling of irradiated fuel

CERTIFIED FUEL HANDLERS

d. The individuals who train the ~~operating staff~~, or perform ~~health physics~~ or quality assurance functions, may report to the appropriate onsite manager; however, these individuals shall have sufficient organizational freedom to ensure their ~~independence from operating pressures.~~

radiation protection

ability to perform their assigned functions.

TS Markups unchanged from Attachment 2 of Byron Administrative Controls LAR submitted on September 24, 2020 (ML20269A401)

5.2 Organization

5.2.2 Facility Staff

The facility staff organization shall include the following:

a. ~~A total of three non licensed operators for the two units is required in all conditions. At least one of the required non licensed operators shall be assigned to each unit.~~

Each duty shift shall be composed of at least one shift manager and two NON-CERTIFIED OPERATORS. The NON-CERTIFIED OPERATOR position may be filled by a CERTIFIED FUEL HANDLER.

b. Shift crew composition may be less than the minimum requirement of ~~10 CFR 50.54(m)(2)(i) and~~ 5.2.2.a ~~and 5.2.2.f~~ for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.

Specification

c. A radiation protection technician shall be on site ~~when fuel is in the reactor~~. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.

during the movement of irradiated fuel and during movement of loads over irradiated fuel

d. ~~Deleted.~~

Oversight of irradiated fuel handling operations shall be provided by a CERTIFIED FUEL HANDLER.

e. ~~The operations manager or the supervisor in charge of the operations shift crews shall hold an SRO license.~~

The shift manager shall be a CERTIFIED FUEL HANDLER.

f. ~~The Shift Technical Advisor (STA) shall provide advisory technical support to the Shift Manager in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the facility. In addition, the STA shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift.~~

At all times when irradiated fuel is stored in the spent fuel pool, at least one person qualified to stand watch in the control room (NON-CERTIFIED OPERATOR or CERTIFIED FUEL HANDLER) shall be present in the control room.

and the following conditions are met:
1) No movement of irradiated fuel is in progress;
2) No movement of loads over irradiated fuel is in progress.
This provision does not permit any shift crew position to be unstaffed upon shift change due to the absence or tardiness of an oncoming shift crew member

TS Markups unchanged from Attachment 2 of Byron Administrative Controls LAR submitted on September 24, 2020 (ML20269A401)

5.0 ADMINISTRATIVE CONTROLS

5.3 Facility Staff Qualifications

5.3.1 Each member of the facility staff shall meet or exceed the minimum qualifications referenced for comparable positions as specified in the Exelon ~~Quality Assurance Topical Report~~.

Decommissioning Quality Assurance Program

5.3.2 An NRC-approved training and retraining program for the CERTIFIED FUEL HANDLERS shall be maintained.

TS Markups unchanged from Attachment 2 of Byron Administrative Controls LAR submitted on September 24, 2020 (ML20269A401)

5.0 ADMINISTRATIVE CONTROLS

5.4 Procedures

applicable to the safe storage and handling of irradiated fuel

5.4.1 Written procedures shall be established, implemented, and maintained covering the following activities:

a. The ~~applicable~~ procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978;

Deleted

b. ~~The emergency operating procedures required to implement the requirements of NUREG 0737 and NUREG 0737, Supplement 1, as stated in Generic Letter 82-33, Section 7.1~~;

c. Fire Protection Program implementation; and

d. All programs specified in Specification 5.5.

5.0 ADMINISTRATIVE CONTROLS

5.5 Programs and Manuals

The following programs shall be established, implemented, and maintained.

5.5.1 Offsite Dose Calculation Manual (ODCM)

a. The ODCM shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm and trip setpoints, and in the conduct of the radiological environmental monitoring program;

b. The ODCM shall also contain the radioactive effluent controls and radiological environmental monitoring activities, and descriptions of the information that should be included in the Annual Radiological Environmental Operating, and Radioactive Effluent Release Reports required by Specification 5.6.2 and Specification 5.6.3; and

c. Licensee initiated changes to the ODCM:

1. Shall be documented and records of reviews performed shall be retained. This documentation shall contain:

i. sufficient information to support the change(s) together with the appropriate analyses or evaluations justifying the change(s), and

ii. a determination that the change(s) maintain the levels of radioactive effluent control required by 10 CFR 20.1302, 40 CFR 190, 10 CFR 50.36a, and 10 CFR 50, Appendix I, and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations;

2. Shall become effective after the approval of the station manager; and

5.5 Programs and Manuals

5.5.1 Offsite Dose Calculation Manual (ODCM) (continued)

3. Shall be submitted to the NRC in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Radioactive Effluent Release Report for the period of the report in which any change in the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.

5.5.2 ~~Primary Coolant Sources Outside Containment~~

DELETED

~~This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include the recirculation portions of the Containment Spray, Safety Injection, Chemical and Volume Control, and Residual Heat Removal. The program shall include the following:~~

~~a. Preventive maintenance and periodic visual inspection requirements; and~~

~~b. Integrated leak test requirements for each system at least once per 18 months.~~

~~The provisions of SR 3.0.2 are applicable.~~

5.5.3 ~~Deleted.~~

DELETED

5.5 Programs and Manuals

5.5.4 Radioactive Effluent Controls Program

This program conforms to 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to members of the public from radioactive effluents as low as reasonably achievable. The program shall be contained in the ODCM, shall be implemented by procedures, and shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

a. Limitations on the functional capability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM;

b. Limitations on the concentrations of radioactive material released in liquid effluents to unrestricted areas, conforming to 10 times the concentrations stated in 10 CFR 20, Appendix B, Table 2, Column 2 (to paragraphs 20.1001 - 20.2402);

c. Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.1302 and with the methodology and parameters in the ODCM;

d. Limitations on the annual and quarterly doses or dose commitment to a member of the public from radioactive materials in liquid effluents released from ~~each unit~~ the facility to unrestricted areas, conforming to 10 CFR 50, Appendix I;

e. Determination of cumulative dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days. Determination of projected dose contributions from radioactive effluents in accordance with the methodology in the ODCM at least every 31 days;

5.5 Programs and Manuals

5.5.4 Radioactive Effluent Controls Program (continued)

f. Limitations on the functional capability and use of the liquid and gaseous effluent treatment systems to ensure that appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a period of 31 days would exceed 2% of the guidelines for the annual dose or dose commitment, conforming to 10 CFR 50, Appendix I;

g. Limitations on the dose rate resulting from radioactive material released in gaseous effluents to areas beyond the site boundary conforming to the following:

1. For noble gases: ≤ a dose rate of 500 mrem/yr to the whole body and ≤ a dose rate of 3000 mrem/yr to the skin, and

2. For Iodine-131, Iodine-133, Tritium, and for all radionuclides in particulate form with half lives > 8 days: ≤ a dose rate of 1500 mrem/yr to any organ;

h. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from ~~each unit~~ the facility to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I;

i. Limitations on the annual and quarterly doses to a member of the public from Iodine-131, Iodine-133, Tritium, and all radionuclides in particulate form with half lives > 8 days in gaseous effluents released from ~~each unit~~ the facility to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I; and

j. Limitations on the annual dose or dose commitment to any member of the public due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR 190.

5.5.5 ~~Component Cyclic or Transient Limit~~

DELETED

~~This program provides controls to track the UFSAR, Section 3.9, cyclic and transient occurrences to ensure that components are maintained within the design limits.~~

5.5 Programs and Manuals

5.5.6 ~~Pre-Stressed Concrete Containment Tendon Surveillance Program~~

DELETED

~~This program provides controls for monitoring any tendon degradation in pre-stressed concrete containments, including effectiveness of its corrosion protection medium, to ensure containment structural integrity. The program shall include baseline measurements prior to initial operations. The Tendon Surveillance Program, inspection frequencies, and acceptance criteria shall be in accordance with Section XI, Subsection IWL of the ASME Boiler and Pressure Vessel Code and applicable addenda as required by 10 CFR 50.55a, except where an alternative, exemption, or relief has been authorized by the NRC. Determining pre- stressing forces for inspections shall be consistent with the recommendations of Regulatory Guide 1.35.1, July 1990.~~

~~The provisions of SR 3.0.3 are applicable to the Tendon Surveillance Program inspection frequencies.~~

5.5.7 ~~Reactor Coolant Pump Flywheel Inspection Program~~

DELETED

~~This program shall provide for the inspection of each reactor coolant pump flywheel in general conformance with the recommendations of Regulatory Position c.4.b of Regulatory Guide 1.14, Revision 1, August 1975.~~

~~For reactor coolant pump motor serial numbers 4S88P961 and 1S88P961, in lieu of Regulatory Position c.4.b(1) and c.4.b(2), a qualified in-place UT examination over the volume from the inner bore of the flywheel to the circle of one-half the outer radius or a surface examination (MT and/or PT) of exposed surfaces of the removed flywheel may be conducted at approximately 10 year intervals coinciding with the Inservice Inspection schedule as required by ASME Section XI.~~

~~For all other reactor coolant pump motors, in lieu of Regulatory Position c.4.b(1) and c.4.b(2), a qualified in-place UT examination over the volume from the inner bore of the flywheel to the circle of one-half the outer radius or a surface examination (MT and/or PT) of exposed surfaces of the removed flywheel may be conducted at an interval not to exceed 20 years.~~

NO CHANGES ON THIS PAGE

5.5 Programs and Manuals

5.5.8 DELETED

5.5 Programs and Manuals

5.5.9 ~~Steam Generator (SG) Program~~

DELETED

~~A Steam Generator Program shall be established and implemented to ensure that SG tube integrity is maintained. In addition, the Steam Generator Program shall include the following:~~

~~a. Provisions for condition monitoring assessments. Condition monitoring assessment means an evaluation of the "as found" condition of the tubing with respect to the performance criteria for structural integrity and accident induced leakage. The "as found" condition refers to the condition of the tubing during an SG inspection outage, as determined from the inservice inspection results or by other means, prior to the plugging of tubes. Condition monitoring assessments shall be conducted during each outage during which the SG tubes are inspected or plugged to confirm that the performance criteria are being met.~~

~~b. Performance criteria for SG tube integrity. SG tube integrity shall be maintained by meeting the performance criteria for tube structural integrity, accident induced leakage, and operational LEAKAGE.~~

~~1. Structural integrity performance criterion: All in-service steam generator tubes shall retain structural integrity over the full range of normal operating conditions (including startup, operation in the power range, hot standby, and cool down), all anticipated transients included in the design specification, and design basis accidents. This includes retaining a safety factor of 3.0 against burst under normal steady state full power operation primary-to-secondary pressure differential and a safety factor of 1.4 against burst applied to the design basis accident primary-to-secondary pressure differentials. Apart from the above requirements, additional loading conditions associated with the design basis accidents, or combination of accidents in accordance with the design and licensing basis, shall also be evaluated to determine if the associated loads contribute significantly to burst or collapse. In the assessment of tube integrity, those loads that do significantly affect burst or collapse shall be determined and assessed in combination with the loads due to pressure with a safety factor of 1.2 on the combined primary loads and 1.0 on axial secondary loads.~~

5.5 Programs and Manuals

~~5.5.9~~ ~~Steam Generator (SG) Program~~ ~~(continued)~~

~~2.~~ ~~Accident induced leakage performance criterion:~~ ~~The primary to secondary accident induced leakage rate for any design basis accident, other than a SG tube rupture, shall not exceed the leakage rate assumed in the accident analysis in terms of total leakage rate for all SGs and leakage rate for an individual SG. Leakage is not to exceed a total of 1 gpm for all SGs.~~

~~3.~~ ~~The operational LEAKAGE performance criteria is specified in LCO 3.4.13, "RCS Operational LEAKAGE."~~

~~c.~~ ~~Provisions for SG tube plugging criteria.~~ ~~Tubes found by inservice inspection to contain flaws with a depth equal to or exceeding 40% of the nominal wall thickness shall be plugged.~~ ~~The following alternate tube plugging criteria shall be applied as an alternative to the 40% depth based criteria:~~

~~For Unit 2, tubes with service-induced flaws located greater than 14.01 inches below the top of the tubesheet do not require plugging.~~ ~~Tubes with service-induced flaws located in the portion of the tube from the top of the tubesheet to 14.01 inches below the top of the tubesheet shall be plugged upon detection.~~

~~d.~~ ~~Provisions for SG tube inspections.~~ ~~Periodic SG tube inspections shall be performed.~~ ~~The number and portions of the tubes inspected and methods of inspection shall be performed with the objective of detecting flaws of any type (e.g., volumetric flaws, axial and circumferential cracks) that may be present along the length of the tube, from the tube-to-tubesheet weld at the tube inlet to the tube-to-tubesheet weld at the tube outlet, and that may satisfy the applicable tube plugging criteria.~~ ~~For Unit 2, portions of the tube below 14.01 inches from the top of the tubesheet are excluded from this requirement.~~

5.5 Programs and Manuals

~~5.5.9~~ ~~Steam Generator (SG) Program (continued)~~

~~The tube-to-tubesheet weld is not part of the tube. In addition to meeting the requirements of d.1, d.2, and d.3 below, the inspection scope, inspection methods, and inspection intervals shall be such as to ensure that SG tube integrity is maintained until the next SG inspection. A degradation assessment shall be performed to determine the type and location of flaws to which the tubes may be susceptible and, based on this assessment, to determine which inspection methods need to be employed and at what locations.~~

~~1. Inspect 100% of the tubes in each SG during the first refueling outage following SG installation.~~

~~2. For Unit 1, after the first refueling outage following SG installation, inspect each SG at least every 72 effective full power months or at least every third refueling outage (whichever results in more frequent inspections). In addition, the minimum number of tubes inspected at each scheduled inspection shall be the number of tubes in all SGs divided by the number of SG inspection outages scheduled in each inspection period as defined in a, b, c, and d below. If a degradation assessment indicates the potential for a type of degradation to occur at a location not previously inspected with a technique capable of detecting this type of degradation at this location and that may satisfy the applicable tube plugging criteria, the minimum number of locations inspected with such a capable inspection technique during the remainder of the inspection period may be prorated. The fraction of locations to be inspected for this potential type of degradation at this location at the end of the inspection period shall be no less than the ratio of the number of times the SG is scheduled to be inspected in the inspection period after the determination that a new form of degradation could potentially be occurring at this location divided by the total number of times the SG is scheduled to be inspected in the inspection period. Each inspection period defined below may be extended up to 3 effective full power months to include a SG inspection outage in an inspection period and the subsequent inspection period begins at the conclusion of the included SG inspection outage.~~

5.5 Programs and Manuals

~~5.5.9~~ ~~Steam Generator (SG) Program (continued)~~

~~a) After the first refueling outage following SG installation, inspect 100% of the tubes during the next 144 effective full power months. This constitutes the first inspection period;~~

~~b) During the next 120 effective full power months, inspect 100% of the tubes. This constitutes the second inspection period;~~

~~c) During the next 96 effective full power months, inspect 100% of the tubes. This constitutes the third inspection period; and~~

~~d) During the remaining life of the SGs, inspect 100% of the tubes every 72 effective full power months. This constitutes the fourth and subsequent inspection periods.~~

~~3. For Unit 2, after the first refueling outage following SG installation, inspect each SG at least every 48 effective full power months or at least every other refueling outage (whichever results in more frequent inspections) with the exception that each SG is to be inspected during the third refueling outage in B2R23 following inspections completed in refueling outage B2R20. In addition, the minimum number of tubes inspected at each scheduled inspection shall be the number of tubes in all SGs divided by the number of SG inspection outages scheduled in each inspection period as defined in a, b, and c below. If a degradation assessment indicates the potential for a type of degradation to occur at a location not previously inspected with a technique capable of detecting this type of degradation at this location and that may satisfy the applicable tube plugging criteria, the minimum number of locations inspected with such a capable inspection technique during the remainder of the inspection period may be prorated. The fraction of locations to be inspected for this potential type of degradation at this location at the end of the inspection period shall be no less than the ratio of the number of times the SG is scheduled to be~~

5.5 Programs and Manuals

~~5.5.9~~ ~~Steam Generator (SG) Program~~ ~~(continued)~~

~~inspected in the inspection period after the determination that a new form of degradation could potentially be occurring at this location divided by the total number of times the SG is scheduled to be inspected in the inspection period. Each inspection period defined below may be extended up to 3 effective full power months to include a SG inspection outage in an inspection period and the subsequent inspection period begins at the conclusion of the included SG inspection outage.~~

~~a) After the first refueling outage following SG installation, inspect 100% of the tubes during the next 120 effective full power months. This constitutes the first inspection period;~~

~~b) During the next 96 effective full power months, inspect 100% of the tubes. This constitutes the second inspection period; and~~

~~c) During the remaining life of the SGs, inspect 100% of the tubes every 72 effective full power months. This constitutes the third and subsequent inspection periods.~~

~~4. For Unit 1, if crack indications are found in any SG tube, then the next inspection for each affected and potentially affected SG for the degradation mechanism that caused the crack indication shall not exceed 24 effective full power months or one refueling outage (whichever results in more frequent inspections). For Unit 2, if crack indications are found in any SG tube from 14.01 inches below the top of the tubesheet on the hot leg side to 14.01 inches below the top of the tubesheet on the cold leg side, then the next inspection for each affected and potentially affected SG for the degradation mechanism that caused the crack indication shall not exceed 24 effective full power months or one refueling outage (whichever results in more frequent inspections).~~

~~If definitive information, such as from examination of a pulled tube, diagnostic non-destructive testing, or engineering evaluation indicates that a crack-like indication is not associated with a crack(s), then the indication need not be treated as a crack.~~

~~e. Provisions for monitoring operational primary to secondary LEAKAGE.~~

5.5 Programs and Manuals

5.5.10 ~~Secondary Water Chemistry Program~~

DELETED

~~This program provides controls for monitoring secondary water chemistry to inhibit SG tube degradation. The program shall include:~~

~~a. Identification of a sampling schedule for the critical variables and control points for these variables;~~

~~b. Identification of the procedures used to measure the values of the critical variables;~~

~~c. Identification of process sampling points, which shall include monitoring the discharge of the condensate pumps for evidence of condenser inleakage;~~

~~d. Procedures for the recording and management of data;~~

~~e. Procedures defining corrective actions for all off control point chemistry conditions; and~~

~~f. A procedure identifying the authority responsible for the interpretation of the data and the sequence and timing of administrative events, which is required to initiate corrective action.~~

5.5 Programs and Manuals

5.5.11 ~~Ventilation Filter Testing Program (VFTP)~~

DELETED

~~A program shall be established to implement the following required testing of Engineered Safety Feature (ESF) filter ventilation systems at the frequencies specified in conformance with Regulatory Guide 1.52, Revision 2, and ANSI N510-1980, with any exceptions noted in Appendix A of the UFSAR.~~

~~a. Demonstrate for each of the ESF filter systems that an inplace test of the High Efficiency Particulate Air (HEPA) filters shows a penetration specified below when tested in conformance with Regulatory Guide 1.52, Revision 2, and ANSI N510-1980, with any exceptions noted in Appendix A of the UFSAR, at the system flow rate specified below. Verification of the specified flow rates may be accomplished during the performance of SRs 3.7.10.4, 3.7.12.4, and 3.7.13.5, as applicable:~~

~~ESF Ventilation System~~	~~Flow Rate~~	~~Penetration~~
~~Control Room Ventilation (VC) Filtration System (makeup)~~	~~≥ 5400 cfm and ≤ 6600 cfm~~	~~< 0.05%~~
~~Nonaccessible Area Exhaust Filter Plenum Ventilation System (after structural maintenance of the HEPA filter housings)~~	~~≥ 55,669 cfm and ≤ 68,200 cfm per train, and ≥ 18,556 cfm and ≤ 22,733 cfm per bank~~	~~< 1%~~
~~Nonaccessible Area Exhaust Filter Plenum Ventilation System (for reasons other than structural maintenance of the HEPA filter housings)~~	~~≥ 55,669 cfm and ≤ 68,200 cfm per train~~	~~< 1%~~
~~Fuel Handling Building Exhaust Filter Plenum (FHB) Ventilation System~~	~~≥ 18,900 cfm and ≤ 23,100 cfm~~	~~< 1%~~

5.5 Programs and Manuals

~~5.5.11~~ ~~Ventilation Filter Testing Program (VFTP)~~ ~~(continued)~~

~~b.~~ ~~Demonstrate for each of the ESF filter systems that an inplace test of the charcoal adsorber shows a bypass specified below when tested in conformance with Regulatory Guide 1.52, Revision 2, and ANSI N510-1980, with any exceptions noted in Appendix A of the UFSAR, at the system flow rate specified below. Verification of the specified flow rates may be accomplished during the performance of SRs 3.7.10.4, 3.7.12.4, and 3.7.13.5, as applicable:~~

~~ESF Ventilation System~~	~~Flow Rate~~	~~Bypass~~
~~VC Filtration System (makeup)~~	~~≥ 5400 cfm and ≤ 6600 cfm~~	~~< 1%~~
~~VC Filtration System (recirculation, charcoal bed after complete or partial replacement)~~	~~≥ 44,550 cfm and ≤ 54,450 cfm~~	~~< 0.1%~~
~~VC Filtration System (recirculation for reasons other than complete or partial charcoal bed replacement)~~	~~≥ 44,550 cfm and ≤ 54,450 cfm~~	~~< 2%~~
~~Nonaccessible Area Exhaust Filter Plenum Ventilation System (after structural maintenance of the charcoal adsorber housings)~~	~~≥ 55,669 cfm and ≤ 68,200 cfm per train, and ≥ 18,556 cfm and ≤ 22,733 cfm per bank~~	~~< 1%~~
~~Nonaccessible Area Exhaust Filter Plenum Ventilation System (for reasons other than structural maintenance of the charcoal adsorber housings)~~	~~≥ 55,669 cfm and ≤ 68,200 cfm per train~~	~~< 1%~~
~~FHB Ventilation System~~	~~≥ 18,900 cfm and ≤ 23,100 cfm per train~~	~~< 1%~~

5.5 Programs and Manuals

~~5.5.11~~ ~~Ventilation Filter Testing Program (VFTP)~~ ~~(continued)~~

~~c.~~ ~~Demonstrate for each of the ESF filter systems that a laboratory test of a sample of the charcoal adsorber, when obtained as described in Regulatory Guide 1.52, Revision 2, shows the methyl iodide penetration less than the value specified below when tested in conformance with Regulatory Guide 1.52, Revision 2, ANSI N510-1980, and ASTM D3803-1989, with any exceptions noted in Appendix A of the UFSAR, at a temperature of 30ºC and a Relative Humidity (RH) specified below:~~

~~ESF Ventilation System~~	~~Penetration~~	~~RH~~
~~VC Filtration System (makeup)~~	~~2.0%~~	~~70%~~
~~VC Filtration System (recirculation)~~	~~4%~~	~~70%~~
~~Nonaccessible Area Exhaust Filter Plenum Ventilation System~~	~~4.5%~~	~~70%~~
~~FHB Ventilation System~~	~~10%~~	~~95%~~

~~d.~~ ~~Demonstrate for each of the ESF filter systems that the pressure drop across the combined HEPA filters and the charcoal adsorbers is < 6 inches of water gauge when tested in conformance with Regulatory Guide 1.52, Revision 2, and ANSI N510-1980, with any exceptions noted in Appendix A of the UFSAR, at the system flow rate specified below. Verification of the specified flow rates may be accomplished during the performance of SRs 3.7.10.4, 3.7.12.4, and 3.7.13.5, as applicable:~~

~~ESF Ventilation System~~	~~Flow Rate~~
~~VC Filtration System (makeup)~~	~~≥ 5400 cfm and ≤ 6600 cfm~~
~~Nonaccessible Area Exhaust Filter Plenum Ventilation System~~	~~≥ 55,669 cfm and ≤ 68,200 cfm per train~~
~~FHB Ventilation System~~	~~≥ 18,900 cfm and ≤ 23,100 cfm~~

5.5 Programs and Manuals

~~5.5.11~~ ~~Ventilation Filter Testing Program (VFTP)~~ ~~(continued)~~

~~e.~~ ~~Demonstrate for each of the ESF filter systems that a bypass test of the combined HEPA filters and damper leakage shows a total bypass specified below at the system flow rate specified below. Verification of the specified flow rates may be accomplished during the performance of SRs 3.7.12.4 and 3.7.13.5, as applicable:~~

~~ESF Ventilation System~~	~~Flow Rate~~	~~Bypass~~
~~Nonaccessible Area Exhaust Filter Plenum Ventilation System~~	~~≥ 55,669 cfm and ≤ 68,200 cfm per train~~	~~≤ 1%~~
~~FHB Ventilation System~~	~~≥ 18,900 cfm and ≤ 23,100 cfm~~	~~≤ 1%~~

~~f.~~ ~~Demonstrate that the heaters for each of the ESF filter systems dissipate the value specified below when tested in conformance with ANSI N510-1980, with any exceptions noted in Appendix A of the UFSAR.~~

~~ESF Ventilation System~~	~~Wattage~~
~~VC Filtration System~~	~~≥ 24.0 kW~~

~~The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP test frequencies.~~

5.5.12 Explosive Gas and Storage Tank Radioactivity Monitoring Program

This program provides controls for potentially explosive gas mixtures contained in the waste gas system, the quantity of radioactivity contained in gas decay tanks or fed into the off gas treatment system, and the quantity of radioactivity contained in unprotected outdoor liquid storage tanks. The gaseous radioactivity quantities shall be determined following the methodology in Branch Technical Position (BTP) ETSB 11-5, "Postulated Radioactive Release due to Waste Gas System Leak or Failure." The liquid radwaste quantities shall be determined in accordance with the ODCM.

The program shall include:

a. The limits for concentrations of hydrogen and oxygen in the waste gas system and a surveillance program to ensure the limits are maintained. Such limits shall be appropriate to the system's design criteria (i.e., whether or not the system is designed to withstand a hydrogen explosion);

b. A surveillance program to ensure that the quantity of radioactivity contained in each gas decay tank and fed into the offgas treatment system is less than the amount that would result in a whole body exposure of ≥ 0.5 rem to any individual in an unrestricted area, in the event of an uncontrolled release of the tanks' contents; and

c. A surveillance program to ensure that the quantity of radioactivity contained in all outdoor liquid radwaste tanks that are not surrounded by liners, dikes, or walls, capable of holding the tanks' contents and that do not have tank overflows and surrounding area drains connected to the liquid radwaste treatment system is less than the amount that would result in concentrations less than the limits of 10 CFR 20, Appendix B, Table 2, Column 2, at the nearest potable water supply and the nearest surface water supply in an unrestricted area, in the event of an uncontrolled release of the tanks' contents.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Explosive Gas and Storage Tank Radioactivity Monitoring Program surveillance frequencies.

5.5 Programs and Manuals

5.5.13 ~~Diesel Fuel Oil Testing Program~~

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~~A diesel fuel oil testing program to implement required testing of both new fuel oil and stored fuel oil shall be established. The program shall include sampling and testing requirements, and acceptance criteria, all in accordance with applicable ASTM Standards. The purpose of the program is to establish the following:~~

~~a. Acceptability of new fuel oil for use prior to addition to storage tanks by determining that the fuel oil has:~~

~~1. an API gravity or an absolute specific gravity within limits,~~

~~2. a flash point and kinematic viscosity within limits, and~~

~~3. a clear and bright appearance with proper color or a water and sediment content within limits;~~

~~b. Other properties of new fuel oil are within limits within 30 days following sampling and addition to storage tanks; and~~

~~c. Total particulate concentration of the fuel oil is ≤ 10 mg/l when tested every 31 days.~~

~~The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Diesel Fuel Oil Testing Program test frequencies.~~

5.5 Programs and Manuals

5.5.14 Technical Specifications (TS) Bases Control Program

This program provides a means for processing changes to the Bases of these Technical Specifications.

a. Changes to the Bases of the TS shall be made under appropriate administrative controls and reviews.

b. Licensees may make changes to Bases without prior NRC approval provided the changes do not require either of the following:

   1. a change in the TS incorporated in the license; or

   2. a change to the ~~UFSAR~~ DSAR or Bases that requires NRC approval pursuant to 10 CFR 50.59.

c. The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the ~~UFSAR~~ DSAR.

d. Proposed changes that meet the criteria of Specification 5.5.14.b above shall be reviewed and approved by the NRC prior to implementation. Changes to the Bases implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10 CFR 50.71(e) as modified by approved exemptions.