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ATTENTION: "REPLACE" directions do not affect the Table of Contents, Therefore no TOC will be issued with the updated material.

TRM2 - TECHNICAL REQUIREMENTS MANUAL UNIT 2

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SSES MANUAL

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Manual Title: TECHNICAL REQUIREMENTS MANUAL UNIT 2

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3.0 TECHNICAL REQUIREMENT FOR OPERATION (TRO) APPLICABILITY

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

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

If the TRO is met or is no longer applicable prior to expiration of the specified Completion Time(s), completion of the Required Action(s) is not required, unless otherwise stated.

TRO 3.0.3 When a TRO is not met, and the associated ACTIONS are not met, an associated ACTION is not provided, or if directed by the associated ACTIONS, the following actions shall be taken:

1. Take compensatory actions as warranted for exiting TRO 3.0.3 commensurate with the safety significance of the condition. Development and implementation of the compensatory actions and plan for exit of TRO 3.0.3 shall be pursued without delay and in a controlled manner and shall be documented in the TRO 3.0.3 entry Condition Report.
2. Initiate a TRO 3.0.3 entry Condition Report that is coded Level 3 Evaluation to determine possible changes to the TRO that would preclude future entry into TRO 3.0.3.

When corrective measures are completed that permit operation in accordance with the TRO or the TRO actions, completion of the compensatory actions and plan for exiting TRO 3.0.3 is not required.

TRO 3.0.4 When a TRO is not met, entry into a MODE or other specified condition in the Applicability shall not be made except 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. If such situations are discovered and a different action is deemed appropriate, issue a change to the appropriate TRM sections to describe committed actions to be taken.

Exceptions to this Requirement are stated in the individual Requirements. These exceptions allow entry into MODES or other specified conditions in the Applicability when the associated ACTIONS to be entered allow unit operation in the MODE or other specified condition in the Applicability only for a limited period of time. TRO 3.0.4 is only applicable for entry into a MODE or other specified condition in the Applicability in MODES 1, 2, and 3.

(continued)

3.0 TECHNICAL REQUIREMENT FOR OPERATION (TRO) APPLICABILITY

TRO 3.0.4 This Specification shall not prevent changes in MODES or other specified
(continued) conditions in the Applicability that are required to comply with ACTIONS or that
are part of a shutdown of the unit.

TRO 3.0.5 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, the OPERABILITY
of other equipment or variables to be within limits. This is an exception to TRO
3.0.2 for the system returned to service under administrative control to perform
the testing required to demonstrate OPERABILITY.

TRO 3.0.6 When a supported system TRO is not met solely due to a support system TRO
or LCO not being met, the Conditions and Required Actions associated with
this supported system are not required to be entered. Only the support system
TRO or LCO ACTIONS are required to be entered. This is an exception to
TRO 3.0.2 for the supported system.

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 TRO 3.0.2.

3.0 Technical Requirement Surveillance (TRS) Applicability

TRS 3.0.1 TRS shall be met during the MODES or other specified conditions in the Applicability for individual TROs, unless otherwise stated in the TRS. 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 TRO. Failure to perform a Surveillance within the specified Frequency shall be failure to meet the TRO except as provided in TRS 3.0.3. Surveillances do not have to be performed on inoperable equipment or variables outside specified limits.

TRS 3.0.2 The specified Frequency for each TRS 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 Requirement are stated in the individual Requirements.

TRS 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 TRO 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. In the event it is determined that a Surveillance cannot be performed within its specified Frequency, compliance with the requirement to declare the TRO not met may be delayed, from the expiration of the current Surveillance test interval, 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. A risk evaluation shall be performed for any Surveillance delayed greater than 24 hours and the risk impact shall be managed.

(continued)

3.0 Technical Requirement Surveillance (TRS) Applicability

TRS 3.0.3 If the Surveillance is not performed within the delay period, the TRO must
(continued) 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 TRO must immediately be declared not met, and
the applicable Condition(s) must be entered.

Exceptions to this Requirement are stated in the individual Requirements.

TRS 3.0.4 Entry into a MODE or other specified condition in the Applicability of a TRO
shall not be made unless the TRO's Surveillances have been met within their
specified Frequency. 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.

TRS 3.0.4 is only applicable for entry into a MODE or other specified condition
in the Applicability in MODES 1, 2, and 3.

B 3.0 Technical Requirement for Operation (TRO) Applicability

BASES

TROs TRO 3.0.1 through TRO 3.0.6 establish the general requirements applicable to all Requirements and apply at all times, unless otherwise stated.

TRO 3.0.1 TRO 3.0.1 establishes the Applicability statement within each individual Requirement as the requirement for when the TRO is required to be met (i.e., when the unit is in the MODES or other specified conditions of the Applicability statement of each Requirement).

TRO 3.0.2 TRO 3.0.2 establishes that upon discovery of a failure to meet a TRO, the associated ACTIONS shall be met. The Completion Time of each Required Action for an ACTIONS Condition is applicable from the point in time that an ACTIONS Condition is entered. The Required Actions establish those remedial measures that must be taken within specified Completion Times when the requirements of a TRO are not met. This Requirement establishes that:

- a. Completion of the Required Actions within the specified Completion Times constitutes compliance with a Requirement; and
- b. Completion of the Required Actions is not required when a TRO is met within the specified Completion Time, unless otherwise specified.

There are two basic types of Required Actions. The first type of Required Action specifies a time limit in which the TRO must be met. This time limit is the Completion Time to restore an inoperable system or component to OPERABLE status or to restore variables to within specified limits. If this type of Required Action is not completed within the specified Completion Time, a shutdown may be required to place the unit in a MODE or condition in which the Specification is not applicable.

(continued)

B 3.0 Technical Requirement for Operation (TRO) Applicability

BASES

TRO 3.0.2 Whether stated as a Required Action or not, correction of the entered
(continued) Condition is an action that may always be considered upon entering ACTIONS. The second type of Required Action specifies the remedial measures that permit continued operation of the unit that is not further restricted by the Completion Time. In this case, compliance with the Required Actions provides an acceptable level of safety for continued operation.

Completing the Required Actions is not required when a TRO is met or is no longer applicable, unless otherwise stated in the individual Requirements.

The nature of some Required Actions of some Conditions necessitates that, once the Condition is entered, the Required Actions must be completed even though the associated Conditions no longer exist. The individual TRO's Actions specify the Required Actions where this is the case. An example of this is in Technical Requirement TRO 3.4.1, "Chemistry."

The Completion Times of the Required Actions are also applicable when a system or component is removed from service intentionally. The reasons for intentionally relying on the ACTIONS include, but are not limited to, modifications, performance of Surveillances, preventive maintenance, corrective maintenance, or investigation of operational problems. Entering ACTIONS for these or for any other reasons must be done in a manner that does not compromise safety.

(continued)

B 3.0 Technical Requirement for Operation (TRO) Applicability

BASES

TRO 3.0.2 Individual Requirements may specify a time limit for performing a TRS when
(continued) equipment is removed from service or bypassed for testing. In this case, the Completion Times of the Required Actions are applicable when this time limit expires, if the equipment remains removed from service or bypassed.

When a change in MODE or other specified condition is required to comply with Required Actions, the unit may enter a MODE or other specified condition in which another Requirement becomes applicable. In this case, the Completion Times of the associated Required Actions would apply from the point in time that the new Requirement becomes applicable and the ACTIONS Condition(s) are entered.

TRO 3.0.3 TRO 3.0.3 establishes the actions that must be implemented when a TRO is not met and:

- a. An associated Required Action and Completion Time is not met and no other Condition applies; or
- b. The condition of the unit is not specifically addressed by the associated ACTIONS. This means that no combination of Conditions stated in the ACTIONS can be made that exactly corresponds to the actual condition of the unit. Certain combinations of Conditions may exist such that entering TRO 3.0.3 is warranted; in such cases, the Actions specifically state a Condition corresponding to such combinations and also that TRO 3.0.3 be entered immediately.

(continued)

B 3.0 Technical Requirement for Operation (TRO) Applicability

BASES

TRO 3.0.3
(continued) Because entry into the 3.0.3 ACTION is an escalation of the system, structure, component, or unit condition, a Condition Report is required. The Condition Report will address plant safety given the nonconformance with the Technical Requirement. TROs which affect OPERABILITY of TS Functions will have an assessment of TS OPERABILITY.

Compensatory actions and a plan for exiting TRO 3.0.3 shall be developed and implemented in a timely manner commensurate with the safety significance of the entry condition. This will allow for an orderly development of actions and plans providing for time to coordinate any actions deemed unwarranted with the station work schedule.

TRO 3.0.3 entries are undesirable and should be avoided whenever possible. Thus, it is important to evaluate the TRO 3.0.3 entry circumstances to determine if changes to the TRO not met can be made that would preclude the need for future TRO 3.0.3 entries. Completion of the evaluation is not required to exit TRO 3.0.3. The evaluation shall be performed even though TRO 3.0.3 has been/will be exited.

TRO 3.0.4 TRO 3.0.4 establishes limitations on changes in MODES or other specified conditions in the Applicability when a TRO is not met. It precludes placing the unit in a MODE or other specified condition stated in that Applicability (e.g., Applicability desired to be entered) when the following exist:

- a. Unit conditions are such that the requirements of the TRO would not be met in the Applicability desired to be entered; and
- b. Continued noncompliance with the TRO requirements, if the Applicability were entered, would result in the unit being required to exit the Applicability desired to be entered to comply with the Required Actions.

Compliance with Required Actions that permit continued operation of the unit for an unlimited period of time in a MODE or other specified condition provides an acceptance level of safety for continued operation. This is without regard to the status of the unit before or after the MODE change. Therefore, in such cases, entry into a MODE or other specified condition in the Applicability may be made in accordance with the provisions of the Required Actions. The provisions of this Requirement should not be interpreted as endorsing the failure to exercise the good practice of restoring systems or components to OPERABLE status before entering an associated MODE or other specified condition in the Applicability.

(continued)

B 3.0 Technical Requirement for Operation (TRO) Applicability

BASES

TRO 3.0.4 The provisions of TRO 3.0.4 shall not prevent changes in MODES or other
(continued) specified conditions in the Applicability that are required to comply with
 ACTIONS. In addition, the provisions of TRO 3.0.4 shall not prevent changes
 in MODES or other specified conditions in the Applicability that result from any
 unit shutdown.

TRO 3.0.4 is not applicable to TROs that are identified as APPLICABLE "At all times." This term is considered to constitute one inclusive operating condition that corresponds to and encompasses all MODES as defined in the Technical Specification, as well as all special operating conditions, including when the reactor vessel is defueled. Entry into any MODE or other special condition is done within the context of "all times," and, therefore, is not a change within the Applicability to which TRO 3.0.4 applies.

Other exceptions to TRO 3.0.4 are stated in the individual Requirements. Exceptions may apply to all the ACTIONS or to a specific Required Action of a Requirement. TRO 3.0.4 is only applicable when entering MODE 3 from MODE 4, MODE 2 from MODE 3 or 4, or MODE 1 from MODE 2. Furthermore, TRO 3.0.4 is applicable when entering any other specified condition in the Applicability only while operating in MODE 1, 2, or 3. The requirements of TRO 3.0.4 do not apply in MODES 4 and 5, or in other specified conditions of the Applicability (unless in MODE 1, 2, or 3) because the ACTIONS of individual Requirements sufficiently define the remedial measures to be taken.

Surveillances do not have to be performed on the associated inoperable equipment (or on variables outside the specified limits), as permitted by TRS 3.0.1. Therefore, changing MODES or other specified conditions while in an ACTIONS Condition, either in compliance with TRO 3.0.4 or where an

(continued)

B 3.0 Technical Requirement for Operation (TRO) Applicability

BASES

TRO 3.0.4 exception to TRO 3.0.4 is stated, is not a violation of TRS 3.0.1 or TRS 3.0.4
(continued) for those surveillances that do not have to be performed due to the associated inoperable equipment. However, TRSs must be met to ensure OPERABILITY prior to declaring the associated equipment OPERABLE (or variable within limits) and restoring compliance with the affected TRO.

TRO 3.0.5 TRO 3.0.5 establishes the allowance for restoring equipment to service under administrative controls when it has been removed from service or declared inoperable to comply with ACTIONS. The sole purpose of this Requirement is to provide an exception to TRO 3.0.2 (e.g., to not comply with the applicable Required Action(s) to allow the performance of TRSs to demonstrate:

- a. The OPERABILITY of the equipment being returned to service; or
- b. The OPERABILITY of other equipment; or
- c. That variables are within limits

The administrative controls ensure the time the equipment is returned to service in conflict with the requirements of the ACTIONS is limited to the time absolutely necessary to perform the allowed TRSs. This Requirement does not provide time to perform any other preventive or corrective maintenance.

An example of demonstrating the OPERABILITY of the equipment being returned to service is reopening a containment isolation valve that has been closed to comply with Required Actions and must be reopened to perform the TRSs.

(continued)

B 3.0 Technical Requirement for Operation (TRO) Applicability

BASES

TRO 3.0.5 An example of demonstrating the OPERABILITY of other equipment is taking
(continued) an inoperable channel or trip system out of the tripped condition to prevent the
trip function from occurring during the performance of a TRS on another
channel in the other trip system. A similar example of appropriate response
during the performance of an TRS on another channel in the same trip system.

TRO 3.0.6 TRO 3.0.6 establishes an exception to TRO 3.0.2 for support systems that
have a TRO or LCO specified in the Technical Requirement Specifications
(TRS) or Technical Specification (TS). This exception is provided because
TRO 3.0.2 would require that the Conditions and Required Actions of the
associated inoperable supported system TRO be entered solely due to the
inoperability of the support system. This exception is justified because the
actions that are required to ensure the plant is maintained in a safe condition
are specified in the support system TRO's or LCO's Required Actions. These
Required Actions may include entering the supported system's Conditions and
Required Actions or may specify other Required Actions.

When a support system is inoperable and there is a TRO or LCO specified for
it in the TRS or TS, the supported system(s) are required to be declared
inoperable if determined to be inoperable as a result of the support system
inoperability. However, it is not necessary to enter into the supported systems'
Conditions and Required Actions unless directed to do so by the support
system's Required Actions. The potential confusion and inconsistency of
requirements related to the entry into multiple support and supported systems'
Conditions and Required Actions are eliminated by providing all the actions
that are necessary to ensure the plant is maintained in a safe condition in the
support system's Required Actions.

(continued)

B 3.0 Technical Requirement for Operation (TRO) Applicability**BASES**

TRO 3.0.6
(continued) However, there are instances where a support system's Required Action may either direct a supported system to be declared inoperable or direct entry into Conditions and Required Actions for the supported system. This may occur immediately or after some specified delay to perform some other Required Action. Regardless of whether it is immediate or after some delay, 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 TRO 3.0.2.

B 3.0 TECHNICAL REQUIREMENT SURVEILLANCE (TRS) APPLICABILITY**BASES**

TRS TRS 3.0.1 through TRS 3.0.4 establish the general requirements applicable to all Requirements and apply at all times, unless otherwise stated.

TRS 3.0.1 TRS 3.0.1 establishes the requirement that TRSs must be met during the MODES or other specified conditions in the Applicability for which the requirements of the TRO apply, unless otherwise specified in the individual TRSs. This Requirement is to ensure that Surveillances are performed to verify the OPERABILITY of systems and components, and that variables are within specified limits. Failure to meet a Surveillance within the specified Frequency, in accordance with TRS 3.0.2, constitutes a failure to meet a TRO.

Systems and components are assumed to be OPERABLE when the associated TRSs have been met. Nothing in this Requirement, however, is to be construed as implying that systems or components are OPERABLE when:

- a. The systems or components are known to be inoperable, although still meeting the TRSs; or
- b. The requirements of the Surveillance(s) are known to be not met between required Surveillance performances.

Surveillances do not have to be performed when the unit is in a MODE or other specified condition for which the requirements of the associated TRO are not applicable, unless otherwise specified: -

Surveillances, including Surveillances invoked by Required Actions, do not have to be performed on inoperable equipment because the ACTIONS define the remedial measures that apply. Surveillances have to be met and performed in

(continued)

B 3.0 TECHNICAL REQUIREMENT SURVEILLANCE (TRS) APPLICABILITY**BASES**

TRS 3.0.1 accordance with TRS 3.0.2, prior to returning equipment to OPERABLE status.
(continued) Upon completion of maintenance, appropriate post maintenance testing is required to declare equipment OPERABLE. This includes ensuring applicable Surveillances are not failed and their most recent performance is in accordance with TRS 3.0.2. Post maintenance testing may not be possible in the current MODE or other specified conditions in the Applicability due to the necessary unit parameters not having been established. In these situations, the equipment may be considered OPERABLE provided testing has been satisfactorily completed to the extent possible and the equipment is not otherwise believed to be incapable of performing its function. This will allow operation to proceed to a MODE or other specified condition where other necessary post maintenance tests can be completed.

TRS 3.0.2 TRS 3.0.2 establishes the requirements for meeting the specified Frequency for Surveillances and any Required Action with a Completion Time that requires the periodic performance of the Required Action on a "once per ..." interval.

TRS 3.0.2 permits a 25% extension of the interval specified in the Frequency. This extension facilitates Surveillance scheduling and considers plant operating conditions that may not be suitable for conducting the Surveillance (e.g., transient conditions or other ongoing Surveillance or maintenance activities).

The 25% extension does not significantly degrade the reliability that results from performing the Surveillance at its specified Frequency. This is based on the recognition that the most probable result of any particular Surveillance being performed is the verification of conformance with the TRSs. The exceptions to TRS 3.0.2 are

(continued)

B 3.0 TECHNICAL REQUIREMENT SURVEILLANCE (TRS) APPLICABILITY**BASES**

**TRO 3.0.2
(continued)**

those Surveillances for which the 25% extension of the interval specified in the Frequency does not apply. These exceptions are stated in the individual Requirements. As stated in TRS 3.0.2, the 25% extension also does not apply to the initial portion of a periodic Completion Time that requires performance on a "once per ..." basis. The 25% extension applies to each performance after the initial performance. The initial performance of the Required Action, whether it is a particular Surveillance or some other remedial action, is considered a single action with a single Completion Time. One reason for not allowing the 25% extension to this Completion Time is that such an action usually verifies that no loss of function has occurred by checking the status of redundant or diverse components or accomplishes the function of the inoperable equipment in an alternative manner.

The provisions of TRS 3.0.2 are not intended to be used repeatedly merely as an operational convenience to extend Surveillance intervals (other than those consistent with refueling intervals) or periodic Completion Time intervals beyond those specified.

TRS 3.0.3

TRS 3.0.3 establishes the flexibility to defer declaring affected equipment inoperable or an affected variable outside the specified limits when a Surveillance has not been completed within the specified Frequency. A delay period of up to 24 hours or up to the limit of the specified Frequency, whichever is greater, applies from the point in time that it is discovered that the Surveillance has not been performed in accordance with TRS 3.0.2, and not at the time that the specified Frequency was not met.

If a Surveillance cannot be performed within its specified Frequency due to unusual conditions, such as a structure, system, or component configuration that prevents performance of a test, or performance of the test would have an adverse impact on plant risk, compliance with the requirement to declare the TRO not met may be delayed. This delay period starts at the expiration of the current Surveillance test interval. The delay can be up to 24 hours or up to the limit of the specified Frequency, whichever is greater.

This delay period provides adequate time to complete Surveillances that have been missed. This delay period permits the completion of a Surveillance before complying with Required Actions or other remedial measures that might preclude completion of the Surveillance.

(continued)

B 3.0 TECHNICAL REQUIREMENT SURVEILLANCE (TRS) APPLICABILITY**BASES**

**TRS 3.0.3
(continued)**

The basis for this delay period includes consideration of unit conditions, adequate planning, availability of personnel, the time required to perform the Surveillance, the safety significance of the delay in completing the required Surveillance, and the recognition that the most probable result of any particular Surveillance being performed is the verification of conformance with the requirements.

When a Surveillance with a Frequency based not on time intervals, but upon specified unit conditions, operating situations, or requirements of regulations (e.g., prior to entering MODE 1 after each fuel loading, or in accordance with 10 CFR 50, Appendix J, as modified by approved exemptions, etc.) is discovered to not have been performed when specified, TRS 3.0.3 allows for the full delay period of up to the specified Frequency to perform the Surveillance. However, since there is not a time interval specified, the missed Surveillance should be performed at the first reasonable opportunity.

TRS 3.0.3 provides a time limit for, and allowances for the performance of, Surveillances that become applicable as a consequence of MODE changes imposed by Required Actions.

Failure to comply with specified Frequencies for TRSs is expected to be an infrequent occurrence. Use of the delay period established by TRS 3.0.3 is a flexibility which is not intended to be used as an operational convenience to extend Surveillance intervals. While up to 24 hours or the limit of the specified Frequency is provided to perform the missed Surveillance, it is expected that the missed Surveillance will be performed at the first reasonable opportunity. The determination of the first reasonable opportunity should include consideration of the impact on plant risk (from delaying the Surveillance as well as any plant configuration changes required or shutting the plant down to perform the Surveillance) and impact on any analysis assumptions, in addition to unit conditions, planning, availability of

(continued)

B 3.0 TECHNICAL REQUIREMENT SURVEILLANCE (TRS) APPLICABILITY**BASES**

**TRS 3.0.3
(continued)**

personnel, and the time required to perform the Surveillance. This risk impact should be managed through the program in place to implement 10 CFR 50.65(a)(4) and its implementation guidance, NRC Regulatory Guide 1.182, "Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants." This Regulatory Guide addresses consideration of temporary and aggregate risk impacts, determination of risk management action thresholds, and risk management action up to and including plant shutdown. The missed Surveillance should be treated as an emergent condition as discussed in the Regulatory Guide. The risk evaluation may use quantitative, qualitative, or blended methods. The degree of depth and rigor of the evaluation should be commensurate with the importance of the component. Missed Surveillances for important components should be analyzed quantitatively. If the results of the risk evaluation determine the risk increase is significant, this evaluation should be used to determine the safest course of action. All Surveillances whose Frequency has been extended in accordance with TRS 3.0.3 will be placed in the Corrective Action Program.

If a Surveillance is not completed within the allowed delay period, then the equipment is considered inoperable or the variable is considered outside the specified limits and the Completion Times of the Required Actions for the applicable TRO Conditions begin immediately upon expiration of the delay period. If a Surveillance is failed within the delay period, then the equipment is inoperable, or the variable is outside the specified limits and the Completion Times of the Required Actions for the applicable TRO Conditions begin immediately upon the failure of the Surveillance.

Completion of the Surveillance within the delay period allowed by this Requirement, or within the Completion Time of the ACTIONS, restores compliance with TRS 3.0.1.

Exceptions to TRS 3.0.3 are provided in instances where requiring equipment to be considered inoperable, in accordance with TRS 3.0.3, would not provide appropriate remedial measures for the associated condition. An example of this is in TRO 3.11.4.1, "Radiological Environmental Monitoring." TRO 3.11.4.1 has surveillances that implement required environmental sampling and analysis. If a portion of the sampling or analysis is not completed as required, the programmatic response is to report the condition to the Nuclear Regulatory Commission and in most instances describe the corrective actions taken to correct the condition. There are no result

(continued)

B 3.0 TECHNICAL REQUIREMENT SURVEILLANCE (TRS) APPLICABILITY**BASES**

| | |
|----------------------------------|--|
| TRS 3.0.3 (continued) | thresholds built into the monitoring and analysis program that would result in declaring equipment inoperable or in a plant shutdown. Therefore, it is appropriate that the provisions of TRO 3.0.3 be waived for this TRO. These exceptions are addressed in the individual Requirements. |
|----------------------------------|--|

| | |
|------------------|--|
| TRS 3.0.4 | <p>TRS 3.0.4 establishes the requirement that all applicable TRSs must be met before entry into a MODE or other specified condition in the Applicability. This Requirement ensures that system and component OPERABILITY requirements and variable limits are met before entry into MODES or other specified conditions in the Applicability for which these systems and components ensure safe operation of the unit.</p> |
|------------------|--|

The provisions of this Requirement should not be interpreted as endorsing the failure to exercise the good practice of restoring systems or components to OPERABLE status before entering an associated MODE or other specified condition in the Applicability.

However, in certain circumstances, failing to meet a TRS will not result in TRS 3.0.4 restricting a MODE change or other specified condition change. When a system, subsystem, division, component, device, or variable is inoperable or outside its specified limits, the associated TRS(s) are not required to be performed per TRS 3.0.1, which states that Surveillances do not have to be performed on inoperable equipment. When equipment is inoperable, TRS 3.0.4 does not apply to the associated TRS(s) since the requirement for the TRS(s) to be performed is removed. Therefore, failing to perform the Surveillance(s) within the specified Frequency does not result in an TRS 3.0.4 restriction to changing MODES or other specified conditions of the Applicability. However, since the TRO is not met in this instance, TRO 3.0.4 will govern any restrictions that may (or may not) apply to MODE or other specified condition changes. The provisions of TRS 3.0.4 shall not prevent changes in MODES or other specified conditions in the Applicability that are required to comply with ACTIONS. In addition, the provisions of TRO 3.0.4 shall not prevent changes in MODES or other specified conditions in the Applicability that result from any unit shutdown. The precise requirements for performance of TRSs are specified such that exceptions to TRS 3.0.4 are not necessary. The specific time frames and conditions necessary for meeting the TRSs are specified in the Frequency, in the Surveillance, or both.

(continued)

B 3.0 TECHNICAL REQUIREMENT SURVEILLANCE (TRS) APPLICABILITY**BASES**

**TRS 3.0.4
(continued)**

This allows performance of Surveillances when the prerequisite condition(s) specified in a Surveillance procedure require entry into the MODE or other specified condition in the Applicability of the associated TRO prior to the performance or completion of a Surveillance. A Surveillance that could not be performed until after entering the TRO Applicability would have its Frequency specified such that it is not "due" until the specific conditions needed are met. Alternately, the Surveillance may be stated in the form of a Note as not required (to be met or performed) until a particular event, condition, or time has been reached. Further discussion of the specific formats of TRS's annotation is found in Section 1.4, Frequency.

TRS 3.0.4 is only applicable when entering MODE 3 from MODE 4, MODE 2 from MODE 3 or 4, or MODE 1 from MODE 2. Furthermore, TRS 3.0.4 is applicable when entering any other specified condition in the Applicability only while operating in MODE 1, 2, or 3. The requirements of TRS 3.0.4 do not apply in MODES 4 and 5, or in other specified conditions of the Applicability (unless in MODE 1, 2, or 3) because the ACTIONS of individual Requirements sufficiently define the remedial measures to be taken.

3.3 Instrumentation

3.3.4 TRM Post-Accident Monitoring Instrumentation

TRO 3.3.4 The TRM post-accident monitoring instrumentation channels shown in Table 3.3.4-1 shall be OPERABLE.

APPLICABILITY: According to Table 3.3.4-1

ACTIONS

NOTE

1. Separate condition entry is allowed for each Function.
2. The provisions of TRO 3.06 are not applicable.

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|--|---|---|
| A. One or more required channel inoperable. | A.1 Enter the Condition referenced in Table 3.3.4-1 for the channel | Immediately |
| B. As required by Required Action A.1 and referenced in Table 3.3.4-1. | B.1 Initiate the preplanned alternate method of monitoring the appropriate parameter(s) | 72 hours |
| | <u>AND</u> B.2 Restore the required channel to OPERABLE status. | 7 days |
| C. As required by Required Action A.1 and referenced in Table 3.3.4-1 | C.1 Restore the required channel(s) to OPERABLE status. | 30 days |
| D. As required by Required Action A.1 and referenced in Table 3.3.4-1 | D.1 Verify affected SRV position by alternate methods. | Immediately <u>AND</u> Once per 24 hours thereafter |

ACTIONS (continued)

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|-----------|--|---|
| | <u>AND</u> D.2 Verify a minimum 14 of the associated acoustic monitor channels and 5 of the ADS SRV acoustic monitor channels are operable. | Immediately |
| | <u>AND</u> D.3.1 Verify SRV tailpipe temperature indication and alarm are available. | Immediately |
| | <u>OR</u> D.3.2 Restore SRV tailpipe temperature indication and alarm to functional status. | 7 days |
| | <u>AND</u> D.4.1 Restore the required channel(s) to OPERABLE status. | 30 days |
| | | <u>OR</u> At next outage with containment entry, not to exceed the next refueling outage for in-accessible containment components. |

TECHNICAL REQUIREMENT SURVEILLANCE

-----NOTE-----

1. Refer to Table 3.3.4-1 to determine which TRSs apply for each Post Accident Monitoring Function.
2. When a channel is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed for up to 6 hours.

| SURVEILLANCE | | FREQUENCY |
|--------------|--|-----------|
| TRS 3.3.4.1 | Perform CHANNEL CHECK | 31 days |
| TRS 3.3.4.2 | Perform CHANNEL FUNCTIONAL TEST | 92 days |
| TRS 3.3.4.3 | Perform a CHANNEL CALIBRATION. The Trip Setpoint shall be less than or equal to 0.25 of the full open noise level. | 24 months |
| TRS 3.3.4.4 | Perform CHANNEL CALIBRATION | 24 months |
| TRS 3.3.4.5 | Perform CHANNEL CALIBRATION of the Primary Containment H ₂ and O ₂ Analyzers. | 92 days |

**TABLE 3.3.4-1
TRM POST-ACCIDENT MONITORING INSTRUMENTATION**

| FUNCTION | APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS | REQUIRED CHANNELS | CONDITIONS REFERENCED FROM REQUIRED ACTION A.1 | REQUIRED SURVEILLANCE |
|--|---|----------------------|---|---|
| 1. Suppression Chamber Air Temperature | 1,2 | 2 | C | TRS 3.3.4.1 TRS 3.3.4.4 |
| 2. Main Steam Safety/Relief Valve Position Indicator (Acoustic Monitor) ^(c) | 1,2 | 1/valve | D | TRS 3.3.4.1 TRS 3.3.4.2 TRS 3.3.4.3 |
| 3. Reactor Building Vent Noble Gas Monitor | | | | |
| a. Mid Range ^(b) | 1,2, (a) | 1 | B | TRS 3.3.4.1 TRS 3.3.4.4 |
| b. High Range ^(b) | 1,2, (a) | 1 | B | TRS 3.3.4.1 TRS 3.3.4.4 |
| 4. Standby Gas Treatment System - Vent Noble Gas Monitor | | | | |
| a. Mid Range ^(b) | 1,2, (a) | 2 | B (Both Ch. Inop) C (One Ch. Inop) | TRS 3.3.4.1 TRS 3.3.4.4 |
| b. High Range ^(b) | 1,2, (a) | 2 | B (Both Ch. Inop) C (One Ch. Inop) | TRS 3.3.4.1 TRS 3.3.4.4 |
| 5. Turbine Building Vent Noble Gas Monitor | | | | |
| a. Mid Range ^(b) | 1,2 | 2 | B (Both Ch. Inop) C (One Ch. Inop) | TRS 3.3.4.1 TRS 3.3.4.4 |
| b. High Range ^(b) | 1,2 | 2 | B (Both Ch. Inop) C (One Ch. Inop) | TRS 3.3.4.1 TRS 3.3.4.4 |

(continued)

TABLE 3.3.4-1 (continued)
TRM POST-ACCIDENT MONITORING INSTRUMENTATION

| FUNCTION | APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS | REQUIRED CHANNELS | CONDITIONS REFERENCED FROM REQUIRED ACTION A.1 | REQUIRED SURVEILLANCE |
|---|---|----------------------|---|----------------------------|
| 6. Standby Gas Treatment System Post Accident Vent Stack Sampling System (PAVSSS) | | | | |
| a. Effluent System flow rate monitor ^(b) | 1,2, (a) | 1 | C | TRS 3.3.4.1 TRS 3.3.4.4 |
| b. Sampler flow rate monitor ^(b) | 1,2, (a) | 1 | C | TRS 3.3.4.1 TRS 3.3.4.4 |
| 7. Turbine Building Post Accident Vent Stack Sampling System (PAVSSS) | | | | |
| a. Effluent System flow rate monitor ^(b) | 1,2 | 1 | C | TRS 3.3.4.1 TRS 3.3.4.4 |
| b. Sampler flow rate monitor ^(b) | 1,2 | 1 | C | TRS 3.3.4.1 TRS 3.3.4.4 |
| 8. Containment H ₂ and O ₂ Analyzer | 1,2 | 2 | C | TRS 3.3.4.1 TRS 3.3.4.5 |

- (a) When moving irradiated fuel in the secondary containment.
 (b) The provisions of TRO 3.0.4 are not applicable.
 (c) Alternate monitoring methods listed in Bases.

3.11 Radioactive Effluents

3.11.1 Liquid Effluents

3.11.1.5 Radioactive Liquid Process Monitoring Instrumentation

TRO 3.11.1.5 The Radioactive Liquid Process Monitoring Instrumentation channels shown in Table 3.11.1.5-1 shall be OPERABLE with their setpoints established in accordance with the ODCM to ensure the alarm will occur prior to exceeding the limits of TRO 3.11.1.1.

APPLICABILITY: As specified in Table 3.11.1.5-1.

ACTIONS

NOTE

1. Separate condition entry is allowed for each channel.
2. The provisions of TRO 3.0.4 are not applicable.
3. The provisions of TRO 3.0.6 are not applicable.

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|---|---|-----------------|
| A One or more Radioactive Liquid Process Monitoring Instrumentation alarm/trip channels setpoint less conservative than the limits allowed by TRO 3.11.1.1. | A.1 Suspend the release of liquid effluents monitored by the affected channel | Immediately |
| | <u>OR</u> A.2 Declare the channel inoperable | Immediately |

(continued)

ACTIONS (continued)

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|--|---|--|
| B. Radioactive Liquid Process Monitoring Instrumentation otherwise inoperable. | B.1.1 Suspend the release of liquid effluents monitored by the affected channel. <u>OR</u> B.1.2 Analyze grab samples for isotopic activity to the required LLDs for liquid effluents (Table 3.11.1.1-1). <u>AND</u> B.2 Restore monitoring instrumentation | Immediately Once per 8 hours when the associated pathway is in service 30 days |
| C. Required Action and Associated Completion Time of Conditions B not met. | C.1 Explain why the inoperability was not corrected in a timely manner | In the next Radioactive Effluent Release Report per TS Section 5.6 |
| D. RHR Heat Exchanger to be drained to the spray pond. | D.1 Analyze grab samples from the RHR Heat Exchanger for isotopic activity to the required LLDs for liquid effluents (Table 3.11.1.1-1): | Prior to draining RHR Heat Exchanger to the spray pond. |

TECHNICAL REQUIREMENT SURVEILLANCE

-----NOTE-----

Refer to Table 3.11.1.5-1 to determine which TRSs apply for each Monitoring Function.

| SURVEILLANCE | FREQUENCY |
|--|-----------|
| TRS 3.11.1.5.1 Perform CHANNEL CHECK. | 24 hours |
| TRS 3.11.1.5.2 Perform a Source Check | 31 days |
| TRS 3.11.1.5.3 Perform CHANNEL FUNCTIONAL TEST | 92 days |
| TRS 3.11.1.5.4 Perform CHANNEL CALIBRATION | 24 months |

TABLE 3.11.1.5-1
RADIOACTIVE LIQUID PROCESS MONITORING INSTRUMENTATION

| FUNCTION | REQUIRED CHANNELS | APPLICABILITY | SURVEILLANCE REQUIREMENTS |
|---|-------------------|---------------|--|
| GROSS RADIOACTIVITY MONITORS NOT PROVIDING AUTOMATIC TERMINATION OF RELEASE | | | |
| 1. Service Water System Effluent Line | 1 | (a) | TRS 3.11.1.5.1 TRS 3.11.1.5.2 TRS 3.11.1.5.3 TRS 3.11.1.5.4 |
| 2. Supplemental Decay Heat Removal Service Water | 1 | (a) | TRS 3.11.1.5.1 TRS 3.11.1.5.2 TRS 3.11.1.5.3 TRS 3.11.1.5.4 |
| 3. RHR Service Water System Effluent Line. | 1/Loop | (b) | TRS 3.11.1.5.1 TRS 3.11.1.5.2 TRS 3.11.1.5.3 TRS 3.11.1.5.4 |

(a) System aligned through Fuel Pool Cooling Heat Exchanger. Alignment change between Service Water System Effluent Line and Supplemental Decay Heat Removal Service Water is not considered to be a change in the applicable condition.

(b) At all times

3.11 Radioactive Effluents

3.11.2 Gaseous Effluents

3.11.2.6 Radioactive Gaseous Effluent Monitoring Instrumentation

TRO 3.11.2.6 The radioactive gaseous effluent monitoring instrumentation channels shown in Table 3.11.2.6-1 shall be OPERABLE with their setpoints established in accordance with the ODCM to ensure that the limits of Requirement 3.11.2.1 are not exceeded.

APPLICABILITY: According to Table 3.11.2.6-1

ACTIONS

NOTE

1. Separate condition entry is allowed for each channel.
2. The provisions of TRO 3.0.6 are not applicable.

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|---|--|-----------------|
| A. Radioactive gaseous effluent monitoring instrumentation channel alarm/trip setpoint less conservative than required to ensure that the limits of Requirement 3.11.2.1 are not exceeded | A.1 Suspend the release of radioactive gaseous effluents monitored by the affected channel | Immediately |
| | <u>OR</u> A.2 Declare the channel inoperable | Immediately |

(continued)

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ACTIONS (continued)

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|---|---|--|
| B. Reactor Building Ventilation System Noble Gas Activity Monitor low range channel inoperable | B.1 Take grab samples | Once per 8 hours while release is in progress. |
| | <u>AND</u> | |
| | B.2 Analyze grab samples for isotopic activity to the required LLDs for principal noble gas gamma emitters (Table 3.11.2.1-1) | Within 24 hours of grab sample |
| | <u>AND</u> | |
| | B.3 Restore monitoring instrumentation. | 30 days |
| C. Deleted | | |
| D. Reactor Building Ventilation Monitoring System Effluent System Flow Rate Monitor or Sampler Flow Rate Monitor inoperable | D.1 Estimate flow rate. | Once per 4 hours while release is in progress |
| | <u>AND</u> | |
| | D.2 Restore monitoring instrumentation. | 30 days |

(continued)

PPL Rev. 3

ACTIONS (continued)

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|---|--|--|
| E. Turbine Building Ventilation System Noble Gas Activity Monitor low range channel inoperable | E.1 Verify mechanical vacuum pump is not in operation. | Immediately |
| | <u>AND</u> | |
| | E.2 Take grab samples. | Once per 8 hours while release is in progress |
| | <u>AND</u> | |
| | E.3 Analyze grab samples for isotopic activity to the required LLDs for principal noble gas gamma emitters (Table 3.11.2.1-1). | Within 24 hours after sample |
| | <u>AND</u> | |
| | E.4 Restore monitoring instrumentation | 30 days |
| F. Deleted | | |
| G. Turbine Building Ventilation Monitoring System Effluent System Flow Rate Monitor or Sampler Flow Rate Monitor inoperable | G.1 Estimate flow rate. | Once per 4 hours while release is in progress. |
| | <u>AND</u> | |
| | G.2 Restore monitoring instrumentation | 30 days |

(continued)

PPL Rev. 3

ACTIONS (continued)

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|--|--|--|
| H. Standby Gas Treatment System Noble Gas Activity Monitor low range channel inoperable | H.1 Take grab samples. <u>AND</u> | Once per 4 hours while release is in progress. |
| | H.2 Analyze grab samples for isotopic activity to the required LLDs for principal noble gas gamma emitters (Table 3.11.2.1-1). <u>AND</u> | Within 24 hours of grab sample being taken. |
| | H.3 Restore monitoring instrumentation. | 30 days |
| I. Deleted | | |
| J. SGTS Ventilation Monitoring System Effluent flow rate monitor or sample flow rate monitor Inoperable. | J.1 Estimate flow rate. <u>AND</u> | Once per 4 hours while release is in progress. |
| | J.2 Restore monitoring instrumentation. | 30 days |

(continued)

PPL Rev. 3

ACTIONS (continued)

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|--|--|---|
| K. Required Actions and Completion Times not met for Conditions B through J. | K.1 Explain why this inoperability was not corrected in a timely manner. | In the next Radioactive Effluent Release Report per TS Section 5.6. |

TECHNICAL REQUIREMENT SURVEILLANCE

NOTE

Refer to Table 3.11.2.6-1 to determine which TRSs apply for each Monitoring Function.

| SURVEILLANCE | FREQUENCY |
|--|-----------|
| TRS 3.11.2.6.1 Perform CHANNEL CHECK | 24 hours |
| TRS 3.11.2.6.2 Deleted | |
| TRS 3.11.2.6.3 Perform Source Check | 31 days |
| TRS 3.11.2.6.4 Perform CHANNEL FUNCTIONAL TEST | 92 days |
| TRS 3.11.2.6.5 Perform CHANNEL CALIBRATION | 24 months |

TABLE 3.11.2.6-1 (Page 1 of 3)
RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

| FUNCTION | APPLICABILITY | REQUIRED CHANNELS | SURVEILLANCE REQUIREMENTS |
|---|---------------|-------------------|--|
| 1. REACTOR BUILDING VENTILATION MONITORING SYSTEM | | | |
| a. Noble Gas Activity Monitor (Low Range) | At all Times | 1 | TRS 3.11.2.6.1 TRS 3.11.2.6.3 TRS 3.11.2.6.4 TRS 3.11.2.6.5 |
| b. Deleted | | | |
| c. Deleted | | | |
| d. Effluent System Flow Rate Monitor | At all Times | 1 | TRS 3.11.2.6.1 TRS 3.11.2.6.4 TRS 3.11.2.6.5 |
| e. Sampler Flow Rate Monitor | At all Times | 1 | TRS 3.11.2.6.1 TRS 3.11.2.6.4 TRS 3.11.2.6.5 |

(continued)

TABLE 3.11.2.6-1 (Page 2 of 3)
RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

| FUNCTION | APPLICABILITY | REQUIRED CHANNELS | SURVEILLANCE REQUIREMENTS |
|---|---------------|-------------------|--|
| 2. TURBINE BUILDING VENTILATION MONITORING SYSTEM | | | |
| a. Noble Gas Activity Monitor (Low Range) | At all Times | 1 | TRS 3.11.2.6.1 TRS 3.11.2.6.3 TRS 3.11.2.6.4 TRS 3.11.2.6.5 |
| b. Deleted | | | |
| c. Deleted | | | |
| d. Effluent System Flow Rate Monitor | At all Times | 1 | TRS 3.11.2.6.1 TRS 3.11.2.6.4 TRS 3.11.2.6.5 |
| e. Sampler Flow Rate Monitor | At all Times | 1 | TRS 3.11.2.6.1 TRS 3.11.2.6.4 TRS 3.11.2.6.5 |

(continued)

TABLE 3.11.2.6-1 (Page 3 of 3)
RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

| FUNCTION | APPLICABILITY | REQUIRED CHANNELS | SURVEILLANCE REQUIREMENTS |
|--|---|-------------------|--|
| 3. STANDBY GAS TREATMENT SYSTEM (SGTS) MONITOR | | | |
| a. Noble Gas Activity Monitor (Low Range) | During operation of SGTS ^(a) | 1 | TRS 3.11.2.6.1 TRS 3.11.2.6.3 TRS 3.11.2.6.4 TRS 3.11.2.6.5 |
| b. Deleted | | | |
| c. Deleted | | | |
| d. Effluent System Flow Rate Monitor | During operation of SGTS ^(a) | 1 | TRS 3.11.2.6.1 TRS 3.11.2.6.4 TRS 3.11.2.6.5 |
| e. Sampler Flow Rate Monitor | During operation of SGTS ^(a) | 1 | TRS 3.11.2.6.1 TRS 3.11.2.6.4 TRS 3.11.2.6.5 |

(a) The provisions of TRO 3.0.4 are not applicable.