DISPOSITION OF THE TECHNICAL SPECIFICATIONS TASK FORCE'S
RESPONSES TO THE NRC STAFF'S COMMENTS REGARDING
TSTF-448, REVISION 1

The NRC staff's comments and the TSTF's responses have been re-numbered to clarify the staff's disposition of each response.

1. NRC Comment: [Referring to Insert 3 of the TSTF's markup of the Bases] The language for the Condition B Bases is very similar to that proposed for Condition D. Both propose that the condition may be for unintentional and intentional entries into the condition. The two Conditions differ in that Condition B applies when the objectives of the Control Room Integrity Program can still be met with compensatory measures in place, but Condition D applies when these objectives cannot be met even with compensatory measures in place. The staff requests clarification of how licensees would make this distinction in practice, absent performing a test. The Bases for Condition B and Condition D needs to be re-written to clarify this consideration.

1.1 TSTF Response: The Technical Specifications Task Force (TSTF) and Nuclear Energy Institute (NEI) Control Room Habitability Task Force (CRHTF) agree with the NRC comment that usage of these two separate Conditions requires clarification.

Disposition: The NRC staff acknowledges that the TSTF and CRHTF agree on the need to clarify the action requirements for an inoperable CRB.

1.2 TSTF Response (continued): In TSTF-448, the TSTF proposed a new, more restrictive Surveillance requirement on control room inleakage. STS SR 3.0.1 states that Surveillances must be met at all times and that failure to meet a Surveillance is failure to meet the LCO. The addition of this new SR means that any time the licensee does not have confidence that control room inleakage is less than the new inleakage limit (either during a test or between tests), the LCO is required to be considered not met (in accordance with the guidance in Generic Letter 91-18.)

Disposition: With Generic Letter (GL) 91-18, the NRC forwarded licensees NRC Inspection Manual, Part 9900, "Operable/Operability: Ensuring the Functional Capability of a System or Component," dated October 31, 1991. This guidance describes the extent to which meeting TS surveillance requirements (SRs) contribute to establishing the operability of a system or component. Consistent with and in addition to this guidance, the Bases for STS SR 3.0.1 clearly states that a system or component is inoperable if the system or component is known to be inoperable, although still meeting the SRs, or the requirements of the SRs are known not to be met between required surveillance performances. The staff concurs that the proposed SR for determining unfiltered leakage into the control room must be met to consider the CRB operable.

1.3 TSTF Response (continued): Recognizing the more restrictive nature of the new Surveillance limit, the TSTF also proposed a new Condition and Completion Time for failure to meet the new Surveillance limit on inleakage.

As explained above, this Condition and Completion Time is needed at all times, not only when testing.

The previous revisions of TSTF-448 added the new Condition and Completion Time to the existing control room filtration Improved Standard Technical Specification requirements. However, as pointed out in the NRC comment and based on discussions within the industry, it is clear that simply adding the new Condition and Completion Time to the existing requirements is confusing. As a result, a proposed revision to TSTF-448 consolidates and simplifies the requirements and makes the application of those requirements clear. This revision combines the previous Conditions B and D into a new Condition B. Model Specifications and Bases are included Attachment 2.

Disposition: The NRC staff concurs with combining the two conditions for an inoperable CRB.

1.4 TSTF Response (continued): Under the proposed revision [in Attachment 2], whenever it is discovered [that] the control room boundary is inoperable, 24 hours is provided to determine if the operator protection objectives of the Control Room Integrity Program can be met. This term was chosen over several other alternatives that appeared in TSTF-448, Revision 1, such as “the objectives of the Control Room Integrity Program are met” or broad references to GDC 19. It would be difficult to interpret “the objectives of the Control Room Integrity Program are met,” because the inleakage limits are part of the Program and those limits are obviously not being met while in the Condition. A reference to GDC 19 would also be inaccurate as GDC 19 also includes remote shutdown requirements. An additional consideration is that not all plants are committed to GDC 19 and inserting the plant-specific design criteria into the Actions would result in significant differences between the specifications of various plants. Therefore, the words “operator protection” were added to the phrase “objectives of the Control Room Integrity Program”. The Bases explanation of this phrase states, “The operator protection objectives of the Control Room Integrity Program are verified to be met by limiting dose from radioactive gas, and exposure to toxic gas and smoke, to levels that support control room habitability, crediting, if necessary, the mitigating actions required by Required Action B.1.”

Disposition: The NRC staff recommends numbering and phrasing the action requirement, to verify control room occupant protection requirements can be met, as follows (For an explanation of the replacement of “CRIP” with “Ventilation Boundary Test Program (VBTP),” see the response and disposition of NRC Comment 2 below.):

> B.2 Verify control room occupant protection requirements, as specified by [the VBTP], can be met, using mitigating actions in accordance with [the VBTP].

The NRC staff also recommends phrasing the Bases explanation of Required Actions B.1 and B.2, as:

> If the CRB is inoperable, the design basis accident control room occupant dose analysis assumption of unfiltered leakage into the control room may be exceeded. During the period that the CRB is inoperable, Required Action B.1 requires implementing mitigating actions to offset the consequences of the inoperable CRB in order to protect control room occupants from potential hazards, which could interfere with operator control of the reactor, in the event of a DBA or non-radiological event. Specification 5.5.18, "[Ventilation

Boundary Test Program (VBTP)]," which specifies the control room occupant protection requirements, also lists some of the mitigating actions that may be credited to enable temporarily meeting those requirements in the event the CRB is inoperable. The VBTP requires the listed mitigating actions to be preplanned for initiation upon intentional and unintentional entry into the condition.

Required Action B.2 requires verifying that the control room occupant protection requirements can be met using mitigating actions. This verification means determining that, under design basis accident conditions, control room occupants would not receive radiation exposures in excess of specified limits by crediting, if necessary, implementation of mitigating actions. Verifying that the control room occupant protection requirements can be met also means determining that an event producing hazardous chemicals, or fire byproducts (such as smoke and halon) would not expose control room occupants to hazardous chemicals or fire by-product levels beyond specified limits (such limits may be qualitative), by crediting, if necessary, implementation of mitigating actions. The 24 hour Completion Time for completing this verification is reasonable based on the low probability of a DBA or non-radiological event occurring during this time period, the use of mitigating actions, and the time necessary to perform an assessment.

1.5 TSTF Response (continued): The revised Actions clarify that 24 hours are allowed to either establish that the operator protection objectives of the Control Room Integrity Program are met or to restore the control room boundary to OPERABLE status. The previous revisions of TSTF-448 had one condition (Condition B) based on control room inleakage not within limits and another condition (Condition D) based on an inoperable boundary. Subsequent industry review determined that this presentation caused confusion and could result in situations in which inappropriate action is taken based on verbatim compliance with the specifications. The proposed Actions are simply predicated on an inoperable control room boundary.

Disposition: The NRC staff concurs with specifying a single condition for an inoperable control room boundary, but recommends not limiting it to Modes 1, 2, 3, and 4. The 24-hour allowance to assess the impact of the condition, judged to render the CRB inoperable, should also apply during shutdown conditions and during fuel movement. Therefore, the condition should be phrased as:

B. CRB inoperable.

The NRC staff concurs with the 24-hour Completion Time for proposed Required Action B.2.1 for verifying that control room occupant protection requirements can be met, but believes that Required Action B.2.2, for restoring the CRB to operable status, is unnecessary. The NRC staff recommends numbering Required Action B.2.1 as Required Action B.2, and phrasing it as stated previously in Section 1.4 above.

The NRC staff also concurs with the Completion Time of “Immediately” for Required Action B.1, and recommends phrasing this action requirement as:

B.1 Implement mitigating actions in accordance with [the VBTP].

1.6 TSTF Response (continued): To clarify the relationship between the inleakage test and the Actions, the Bases of [proposed] SR 3.7.10.5 are revised to state that the purpose of the inleakage test is to verify the control room boundary is OPERABLE.

Disposition: The NRC staff recommend phrasing the Bases for proposed SR 3.7.10.5 as:

> This SR verifies the OPERABILITY of the CRB by requiring testing to measure unfiltered leakage of air into the control room from external areas adjacent to the CRB. The details of this leak testing are contained in the Ventilation Boundary Test Program (VBTP).
>
> If the unfiltered leakage into the control room is determined to exceed the flow limits specified by the VBTP, the unfiltered leakage assumed by the DBA control room occupant dose analyses may not be valid, the CRB shall be declared inoperable and the Condition for an inoperable CRB shall be entered.

1.7 TSTF Response (continued): The Bases of the new Action B describe how the Required Actions are applied, including Required Action B.2.1 which requires verification that the operator protection objectives of the Control Room Integrity Program are met. The Bases now provide additional guidance on what this evaluation should involve, by stating, "This verification can be quantitative or qualitative, and be based on analysis, a test or partial test, experience with operating events, engineering judgment, or a combination of these factors." This approach is consistent with the NRC letter from E. J. Leeds (NRC) to J. W. Davis (NEI), dated January 30, 2004, "NEI Draft White Paper, Use of the Generic Letter 91-18 Process and Alternative Source Terms in the Context of Control Room Habitability," which states in the Background section that when a degraded or nonconforming condition is found, the OPERABILITY determination can be based on analysis, a test or partial test, experience with operating events, engineering judgment, or a combination of those factors.

Disposition: The proposed Bases statement,

> This verification can be quantitative or qualitative, and be based on analysis, a test or partial test, experience with operating events, engineering judgment, or a combination of these factors.

is based on NRC Inspection Manual, Part 9900 Guidance, "Operable/Operability: Ensuring the Functional Capability of a System or Component," dated October 31, 1991, which is referenced in Revision 1 to GL 91-18, Attachment 1, NRC Inspection Manual Part 9900 Guidance, "Resolution of Degraded and Nonconforming Conditions," dated October 8, 1997. The NRC staff objects to including this statement in the Bases for Required Action B.2.1 because the underlying guidance specifically applies to operability determinations. It is not appropriate to also apply this guidance in the context of verifying control room habitability while relying on the implementation of mitigating actions. The NRC may subsequently review a licensee's documented basis for this verification to ascertain

whether it is technically correct and conforms to the licensee's quality assurance program requirements.

1.8 TSTF Response (continued): The January 30, 2004 NRC letter also requests that the term "compensatory measures" be reserved for those conditions in which additional actions are taken to offset the effect of a system that has been determined to be OPERABLE but degraded. This resulted in the need to revise TSTF-448, since in previous versions of TSTF-448 and in the Improved Standard Technical Specifications (ISTS) (i.e., NUREGs 1430-1434), the term "compensatory measures" was used in Actions, which means that the system is not OPERABLE. Therefore, we have substituted the term "mitigating actions" for "compensatory measures" and defined the term in the Bases as, "actions that are taken to offset the consequences of the inoperable control room boundary." The Bases also clarify that while a plant is in Condition B the mitigating actions taken may be credited, if necessary, as part of the verification that the operator protection objectives of the Control Room Integrity Program can be met.

Disposition: The NRC staff concur with using the term "mitigating actions" in place of "compensatory measures (or actions)." The NRC staff suggests phrasing the initial paragraph of the proposed Bases for the Required Actions of Condition B, including the description of the meaning of "mitigating actions," as previously stated in Section 1.4 above.

1.9 TSTF Response (continued): A change is made to add Required Action B.1 which requires mitigating actions to be initiated immediately. A requirement for compensatory measures was in the Bases for Condition D in previous versions of TSTF-448 and was originally introduced by TSTF-287, Revision 5, "Ventilation System Envelope Allowed Outage Time." This Bases requirement was implemented by a commitment discussed in a Reviewer's Note to have compensatory measures available. With the introduction of the Required Action to initiate mitigating actions, the commitment and Reviewer's Note are no longer needed.

Disposition: The NRC staff concurs with deleting the Reviewer's note and its associated commitment, based on proposed Required Action B.1.

1.10 TSTF Response (continued): Also note that the revised Actions replace TSTF-287. TSTF-287 added a 24 hour Completion Time for an inoperable control room boundary in Required Action B.1. In the proposed revisions, Required Action B.2.2 provides this same allowance. However, the Required Actions provided by TSTF-287 and TSTF-448 have been combined and TSTF-448 will supercede TSTF-287 in its entirety.

Disposition: The NRC staff agrees that proposed Required Action B.2.2 is consistent with the current STS Required Action B.1, to restore the operability of the CRB within 24 hours, since both actions are predicated upon implementation of mitigating actions during the 24-hour Completion Time interval. The NRC staff, however, disagrees that TSTF-448, as proposed, would supercede TSTF-287 "in its entirety," because STSs contain requirements for filtered ventilation systems for controlled-ventilation areas, other than the control room. An inoperable boundary of such an area could adversely impact control room occupant exposure to airborne hazards during accident conditions. As proposed, TSTF-448 does not address such systems (and associated area boundaries), but should,

since the scope of TSTF-287 included changes to the associated ventilation system specifications. The NRC staff recommends adding these specifications to the scope of TSTF-448, which would require revising the administrative controls program to include additional boundaries. TSTF-287 revised the following specifications, by STS NUREG number; TSTF-448 presently only addresses those marked by an asterisk "*":

1430: * 3.7.10, Control Room Emergency Ventilation System (CREVS)
3.7.12, [Auxiliary Building] Emergency Ventilation System (EVS)
3.7.13, Fuel Storage Pool Ventilation System (FSPVS)

1431: * 3.7.10, Control Room Emergency Filtration System (CREFS)
3.7.12, Emergency Core Cooling System Pump Room Exhaust Air Cleanup System (ECCS PREACS)
3.7.13, Fuel Building Air Cleanup System (FBACS)
3.7.14, Penetration Room Emergency Air Cleanup System (PREACS)

1432: * 3.7.11, Control Room Emergency Air Cleanup System (CREACS)
3.7.13, ECCS PREACS
3.7.14, FBACS
3.7.15, PREACS

1433: * 3.7.4, Main Control Room Environmental Control (MCREC) System

1434: * 3.7.3, Control Room Fresh Air (CRFA) System

The NRC staff recommends that TSTF-448 include changes to the above listed non-control room specifications that are consistent with changes proposed for the control room specification. That is, for the condition of an inoperable specified ventilation area boundary, these specifications should require implementation of actions to mitigate potential hazards to facility personnel who must perform duties outside the control room during accident conditions. For example, at a B&W facility, upon discovery that the boundary of the auxiliary building negative pressure area is inoperable, the EVS may be incapable of maintaining negative pressure that would normally prevent the release of radioactive gas and particles into adjacent areas. TSTF-287 added the following language to NUREG-1430 Bases for Specification 3.7.12, Required Action B.1, for the condition of "Two EVS trains inoperable due to inoperable auxiliary building negative pressure area boundary.":

> During the [up to 24-hour] period that the auxiliary building negative pressure area boundary is inoperable, appropriate compensatory measures [consistent with the intent, as applicable, of GDC 19, 63, 64 and 10 CFR Part 100] should be utilized to protect plant personnel from potential hazards such as radioactive contamination, toxic chemicals, smoke, temperature and relative humidity, and physical security.

In addition, the term "compensatory measures" in the Bases for the non-control room specifications, listed above, is inconsistent with the currently proposed term "mitigating actions." At the very least, TSTF-448 should preclude this inconsistency.

The NRC staff has included a draft proposal for a new administrative controls program to govern specified ventilation area boundaries that includes provisions for non-control room area boundaries. The program's focus is the effect of an inoperable boundary on control room habitability and offsite consequences, but not the consequences to personnel outside the control room. The NRC staff recommends TSTF consider addressing this issue in TSTF-448, Revision 2.

1.11 TSTF Response (continued): Conditions E, F, G, and H are replaced by Conditions C and D. This clarifies and simplifies the presentation without changing the requirements, with one exception. If two CREFS trains are inoperable, the proposal directs a shutdown instead of the current requirement to enter LCO 3.0.3. This is a more restrictive change because the one hour provided by LCO 3.0.3 to prepare for a shutdown is eliminated. This change is consistent with other NRC and industry initiatives to address loss of function within the specification instead of referring to LCO 3.0.3.

Disposition: The NRC staff concurs with combining TSTF-448, Rev.1, Conditions E and F into Condition C, which applies to Modes 1, 2, 3, and 4 for NUREGs 1430, 1431, and 1432; and Modes 1, 2, 3 for NUREGs 1433 and 1434.

The NRC staff also concurs with combining Conditions G and H into Condition D, which applies during movement of [recently] irradiated fuel assemblies for NUREGs 1430, 1431, and 1432; and during movement of [recently] irradiated fuel assemblies in secondary containment or during OPDRVs for NUREGs 1433 and 1434.

The NRC staff concurs with specifying the shut down action in the control room emergency ventilation specification in place of requiring entry into LCO 3.0.3.

1.12 TSTF Response (continued): The Bases and the Specifications used both the term "boundary" and "envelope" when referring to control room integrity. NEI 99-03, Revision 1, "Control Room Habitability Assessment Guidance," defines "boundary" as "a combination of walls, floor, roof, ducting, doors, penetrations and equipment that physically form the Control Room Envelope." The Control Room Envelope is defined as "the area within the confines of the control room boundary that contains the spaces that control room operators inhabit to control the plant for normal and accident conditions. This space is protected for normal operation, natural events, and accident conditions." Use of the terms "boundary" and "envelope" have been reviewed and revised as necessary to be consistent with these definitions. These definitions have also been added to the Technical Specifications Bases Background.

Disposition: The NRC staff considers the terms "boundary" and "envelope," with respect to any controlled ventilation space, to be synonymous with the definition for "boundary" in NEI 99-03, Revision 1, except that "Control Room Envelope" should just read "control room". In the STSs, the space (i.e., contiguous volume) encompassed by the boundary should be referred to by its usual name, such as control room, penetration room, ECCS pump room, and fuel building. We recognize that in many designs, the boundary of the control room contains additional areas not included in the control room proper. For purposes of the control room emergency ventilation specification, however, each facility should clearly state in the associated Bases which areas are considered part of the "control room," in the context of the areas within the boundary that are served by the

control room ventilation systems. Using “envelope” to mean the space encompassed by the boundary, just in the context of the control room, could create confusion with no benefit to clarity. In addition, the proposed convention would complicate expanding the TSTF-448 scope to the specifications for other specified ventilation systems in STS Section 3.7.

The NRC staff recommends revising all STS Section 3.7 ventilation system specifications and associated Bases to use only the term “boundary,” and not use the term “envelope.”

1.13 TSTF Response (continued): A correction is made to the SR 3.7.10.3 Bases. The Bases state that the 18 month Frequency for verifying that each CREFS train actuates on an actual or simulated actuation signal is specified in Regulatory Guide 1.52. This is incorrect. Regulatory Guide 1.52 does not discuss testing the actuation signal. The Regulatory Guide addresses filter and heater testing and recommends an 18 month Frequency. The Bases are revised to state, “The Frequency of [18] months is consistent with the testing frequencies specified in Regulatory Guide 1.52.”

Disposition: The NRC staff concurs with the proposed clarification of the Bases for SR 3.7.10.3 of NUREG 1431 (and corresponding surveillances in the other STS NUREGs).

2. NRC Comment: [Referring to Insert 5 of the TSTF’s program proposal] Insert 5 proposes adding the Control Room Integrity Program to the Administrative Control Programs and Manuals Section of the Standard Technical Specifications (STS). The following issues need to be addressed [See paragraphs 2, 3, 4, and 5 of this letter.]:

The accident does not arise from a radiological event, hazardous chemicals, or a smoke challenge as stated in the first sentence of the program. Therefore, the words “an accident arising from” should be removed.

The word guidance in the last sentence of the first paragraph differs from the majority of other programs in the STS. All programs in STS Section 5.5 that provide a list of elements to include in a program do not include the word guidance. Typically they state: “...the program shall include the following:.” While guidance is needed within the program, use of the word “guidance” in this context dilutes the essential elements that need to be included in the program. “Guidance” implies providing direction, but not requiring the essential elements. For example, with the proposed wording the program could provide a description of how to define the control room envelope without actually describing it. Therefore, the words “guidance on” should be removed.

Therefore, the staff proposes the use of the following paragraph to address the above issues and make the wording consistent with existing STS programs:

“A Control Room Integrity Program shall be established and implemented to ensure that the control room integrity is maintained such that a radiological event, hazardous chemicals, or a smoke challenge will not prevent the control room operators from controlling the reactor during accident conditions. The program shall provide controls to limit radioactive gas, toxic gas, and smoke leakage into the control room from sources external to the control room envelope to levels that support control room habitability, in

accordance with [10 CFR 50, Appendix A, General Design Criteria 19]. The program shall include the following elements:"

TSTF Response: We agree with the proposed changes.

Disposition: The NRC staff acknowledges the TSTF's agreement with the requested change, which the TSTF has incorporated into the last sentence of the first paragraph of the TSTF's draft of STS 5.5.18. However, the TSTF also revised the first sentence of this this paragraph by inserting the word "boundary" before the word "integrity." The NRC staff has no objection to this clarification, but recommends not using the word "integrity," which is not defined. The NRC staff also recommends revising the first paragraph further, as follows (note, this is written to apply to NUREG-1431):

> A [Ventilation Boundary Test Program (VBTP)] shall be established and implemented to ensure that the boundary of each area of the facility served by a specified ventilation system is maintained such that, with an OPERABLE associated ventilation system train:
>
> - A challenge to the area from a radiological event, hazardous chemical, or fire (e.g., fire byproducts, smoke, halon, etc.) will not prevent designated facility personnel, such as licensed operators and the shift technical advisor, from controlling the reactor from inside the control room boundary (CRB) or at the [[alternate][remote]] shutdown panel, during normal and accident conditions.
>
> - A radiological event will not result in radiological exposure to control room occupants exceeding the limits of 10 CFR Part 50, Appendix A, General Design Criteria 19 (GDC 19), or to members of the public exceeding limits of 10 CFR Part 100 or 10 CFR 50.67, or some fraction thereof.
>
> The VBTP shall control maintenance and testing of boundaries of areas served by CREFS, ECCS PREACS, FBACS, and PREACS.

The recommendations to not use the word "integrity" and to expand the program scope to cover the boundaries of all the areas served by specified ventilation systems, imply replacing the name "CRIP" with a more general title, such as the "VBTP."

3. NRC Comment: [Referring to Insert 5 of the TSTF's program proposal] The Control Room Integrity Program states that the following shall be a part of the program: "Testing for control room inleakage in accordance with the testing **protocols** and at the frequencies specified in Regulatory Guide 1.197..." The use of protocols in the context of Regulatory Guide 1.197 is not clear. The word protocol is not used in Regulatory Guide 1.197 nor within the STS Section 5.5 text (only Westinghouse specifications were checked.) Since a regulatory guide provides guidance, the staff proposes that the word "guidance" be used instead of "protocol" to avoid confusion. As an alternate resolution, the staff also proposes that the phrase "the testing protocols" be removed to be consistent with other STS Section 5.5 references to Regulatory Guides.

TSTF Response: We agree that the word “protocols” may be confusing. As the sentence is discussing testing methods, the word “methods” will be used instead.

Disposition: The NRC staff acknowledges the TSTF’s agreement with the requested change, which the TSTF has incorporated into program element number “d” of the TSTF’s draft of STS 5.5.18. This corresponds to draft Specification 5.5.18.b, in Attachment 4.

4. NRC Comment: [Referring to Insert 5 of the TSTF’s program proposal] The element concerning configuration control needs to be strengthened consistent with the Bases of the technical specification that states: “In addition, the control room boundary must be maintained, including the integrity of walls, floors, ceilings, ductwork and access doors.” Specific boundary interfaces should be identified to be in the maintenance program. Therefore, the program should specify that maintenance should include preventive maintenance of doors, wall/roof/floor penetrations, dampers and floor drains that are part of the control room boundary.

   TSTF Response: Paragraph e of the Control Room Integrity Program states, “Maintaining control room boundary integrity, including configuration control, managing breaches, and preventative maintenance.” The program specifies preventative maintenance of the control room boundary. The implementing Technical Specification’s LCO Bases (which define system boundaries and OPERABILITY requirements) define the control room boundary as walls, floors, ceilings, ductwork and access doors and states that they must be maintained. Therefore, adding this level of detail to the program is not needed and is inconsistent with similar programs in the Technical Specifications.

   Disposition: The NRC staff agree that the suggested level of detail is unnecessary and inconsistent with other programmatic specifications in STS Section 5.5, and that the control room boundary descriptions, contained in the Bases for the associated ventilation system Specifications, are sufficient and need not be duplicated in the program specification itself. However, the NRC staff believes additional other information should be included in proposed STS 5.5.18; see the NRC staff’s suggested presentation and content of STS 5.5.18, which is provided in Attachment 4.

5. NRC Comment: [Referring to Insert 5 of the TSTF’s program proposal] The Control Room Integrity Program must use the methods and assumptions contained in the facility’s design basis analysis for determining compliance with [10 CFR 50, Appendix A, General Design Criteria 19] to establish the limits on control room radioactive and hazardous chemical inleakage.

   TSTF Response: We agree that the licensee must use the methods and assumptions contained in the facility’s design basis analysis to establish the limits on control room radioactive and hazardous chemical inleakage in the Control Room Integrity Program. The NRC has previously requested that each licensee address the details of this subject in Generic Letter 2003-01, “Control Room Habitability,” dated June 12, 2003. We believe details of the plant’s design basis are adequately addressed in that response.

   Disposition: The NRC staff believes the program should clearly state that limits on control room occupant exposure to radioactivity, hazardous chemicals, and fire byproducts, as well as limits on leakage of these hazards into the control room, must be consistent with

the facility's design and licensing bases, including the methods and assumptions used in the analysis for determining compliance with [10 CFR 50, Appendix A, General Design Criteria 19] . The NRC staff has incorporated this item in draft Specifications 5.5.18.a and 5.5.18.f, in Attachment 4 to this letter.

6. NRC Comment: [Referring to Insert 5 of the TSTF's program proposal] The letter or numeration of the subparagraphs in Inserts 5A through 5C are different when they should be the same.

   TSTF Response: We agree to correct this typographical error.

   Disposition: The NRC staff acknowledges that the TSTF will correct this error in Revision 2 of TSTF-448.

7. NRC Comment: [Referring to Insert 7 and the markup of the Bases for STS 3.7.10, Required Action B.1, from TSTF 448, Revision 1] Insert 7 lacks clarity. It references objectives in the Control Room Integrity Program that are not explicitly specified as objectives. The objectives should be clearly stated within the program or they should be repeated in Insert 7.

   TSTF Response: Insert 7 has been eliminated in the proposed revision.

   Disposition: The NRC staff acknowledges that the TSTF will omit this insert from Revision 2 of TSTF-448.

8. NRC Comment: [Referring to Insert 9 and the markup of the third paragraph of the LCO 3.7.10 Bases discussion from TSTF 448, Revision 1] Insert 9 is not needed. The LCO [Bases discussion] should retain the words "within the assumptions of the design analysis."

8.1 TSTF Response: Only NUREG-1430 contains the words "within the assumptions of the design analysis." The other 4 ISTS NUREGs do not. Insert 9 was not added to replace this phrase. The phrase was deleted to bring alignment between NUREG-1430 and the other NUREGs as described in the TSTF-448 justification.

   Disposition: The NRC staff acknowledges that the proposed deletion of the phrase "within the assumptions of the design analysis" from NUREG-1430 is not related to Insert 9. The staff recommends referencing the administrative control program for the CRB, which requires maintaining the CRB in conformance with the facility's design and licensing basis. The NRC staff has incorporated this item in draft Specification 5.5.18.c, in Attachment 4 to this letter.

8.2 TSTF Response (continued): Insert 9, which states "Inleakage must also be maintained such that operator exposure limits are not exceeded," was added to all 5 NUREGs to complement the addition of the control room inleakage requirement. The LCO Bases are used to define OPERABILITY requirements. Therefore, there should be a discussion of all aspects of OPERABILITY, including inleakage.

Disposition: The NRC staff recommends the LCO Bases refer to the administrative controls program for the CRB, which requires maintaining the CRB in conformance with the facility's design and licensing basis, as previously noted in Section 8.1.

9. NRC Comment: [Referring to the revised Bases for STS 3.7.10, Revision 3, Required Action B.1. Note that it is proposed to explicitly require implementing mitigating actions while in Condition B; see Paragraph 1.5 of this letter.] TSTF-448, R.1 proposes a change to the existing [STS 3.7.10, Revision 3] Condition B Bases that eliminates the phrase "and physical security" from the Bases. This change should be outside the scope of TSTF-448. The change involves an issue not previously identified in Revision 0 of TSTF-448 and could delay the issuance of TSTF-448, R.1 since it should involve an additional review by the Office of Nuclear Security and Incident Response.

   TSTF Response: The proposed TSTF-448 entirely replaces the existing Condition B and the associated Bases. The phrase "and physical security" is not included in the revised Bases for the new Condition B. This is appropriate because the control room emergency filtration specification is only concerned with operator protection from radiation, chemicals, or smoke. There is no aspect of physical security. This is consistent with the remainder of the Technical Specifications which do not include any physical security requirements.

   Disposition: The NRC staff recommends keeping the phrase "and physical security" in the list of potential hazards to control room operators, because removing it falls outside the scope of TSTF-448 and would require review by the Office of Nuclear Security and Incident Response. It is not inconceivable that a control room boundary breach could adversely affect existing controls on personnel access to the control room, or otherwise degrade the control room design's capability to protect against intentional sabotage by an intruder; consequently, the licensee should implement appropriate measures to compensate for any reduction in physical security resulting from a degraded control room boundary.

10. NRC Comment: [Referring to the proposed Bases of proposed Condition D from TSTF-448, Revision 1. See Paragraph 1.5, which discusses combining the proposed Condition D with existing Condition B.] The Reviewer's Note needs to be deleted. As written it could prevent entry into Condition D if the licensee decided not to create the written procedures required by the note. Instead the Reviewer's Note should now read: "Adoption of TSTF-448 is dependent on a commitment from the licensee to have written procedures available describing compensatory measures to be taken in the event of an intentional or unintentional entry into Conditions B or D.

    Proposed Condition D (BWOG) states: 1) "compensatory measures (consistent with the intent of GDC 19) **should** be utilized...," and 2) "preplanned measures **should** be available to address these concerns for intentional and unintentional entry into the Condition." These are not consistent with the "Reviewers Note" that states that Condition D **is** dependent upon a commitment from the licensee to have written procedures available describing compensatory measures to be taken in the event of entry into Condition D, and the justification for the 24-hour Completion Time. This justification states that: "The 24 hour Completion Time is reasonable based on the low probability of a DBA occurring during this time period, and **the use of compensatory measures**."

Therefore, the word **should** in statements 1 and 2 (provided above) needs to be changed to **must**. These changes will make these statements consistent with the note and the justification for the 24 hour Completion Time. This wording would also make the Condition D Bases consistent with the wording in proposed Insert 3.

TSTF Response: As stated in the response to Comment 1, the Reviewer's Note is deleted and a commitment is no longer required from the licensee. The requirement to initiate compensatory measures (now mitigating actions) has been added to the Technical Specifications as Required Action B.1.

Disposition: The NRC staff acknowledges that the TSTF's latest proposal to combine the two conditions for an inoperable control room boundary, which had been proposed by TSTF-448, Revision1, resolves the staff's comments by requiring immediate implementation of mitigating actions upon entry into Condition B for an inoperable control room boundary.

11. NRC Comment: [Referring to the proposed Bases of proposed Conditions B and D from TSTF-448, Revision 1. See Paragraph 1.5, which discusses combining the two conditions.] The phrase, "consistent with the intent of GDC 19" should be changed to "consistent with the intent of [10 CFR 50, Appendix A, General Design Criterion 19]" to be consistent with the format used to reference GDC 19 in the proposed Control Room Integrity Program.

    TSTF Response: The existing reference is the most common method used to reference the General Design Criteria throughout the Bases and should be continued for consistency of use.

    Disposition: The NRC staff withdraws the comment, but recommends adding GDC 19 to the list of references at the end of the Bases for Specification 3.7.10.